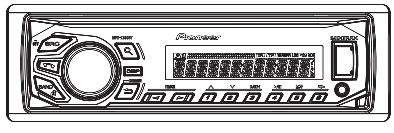
Pioneer

Service Manual

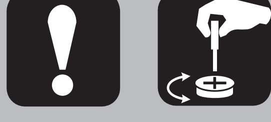


MVH-X360BT/XINEW5

ORDER NO.
CRT5389

RDS MEDIA CENTER RECEIVER

MVH-X360BT/XINEW5
MVH-X360BT/XINUC
MVH-X365BT/XINCS
MVH-X365BT/XINGS



PIONEER CORPORATION 1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

K-ZZZ AUG. 2013 Printed in Japan

SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

Where in a manufacturer's service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:

⚠

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacturer.
Discord used batteries according to the manufacturer's instructions.

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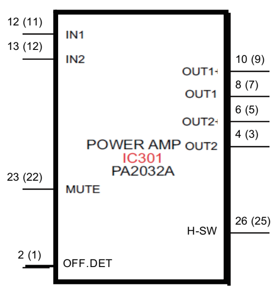
1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
3. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
4. Notes about installation and pin number description of Power IC (IC301: PA2032A)
   The Power IC, PA2032A used on tha Tuner Amp Unit is a 25 pin IC.
   The same PCB of the Tuner Amp Unit is used for other models that use a 27 pin IC, too.
   So, the PCB has lands for a 27 pin IC.
   When you replace the Power IC, install the Power IC onto 25 pins (2- 26 pin) located in the center of 27 pins for IC301.

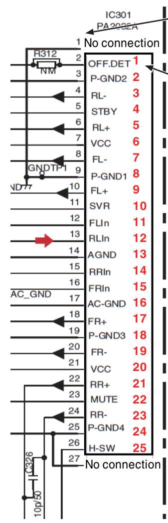
   Therefore, when you check the Power IC on the block diagram, the schematic diagram and the PCB connection diagram, you have to pay attention as follows.

BLOCK DIAGRAM



The pin number is a number on the PCB (silk printing).
The number in parentheses means the pin number of IC itself.

SCHEMATIC DIAGRAM



The pin number of left side is a number on the PCB (silk printing).

The pin number of right side (in the IC frame) means the pin number of IC itself.

1.2 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40°C.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373°C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

2. SPECIFICATIONS
2.1 SPECIFICATIONS

- **MVH-X360BT/XINEW5**

General
Power source ....14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ....Negative type
Maximum current consumption
.................................10.0 A
Backup current................. 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 188 mm × 58 mm × 15 mm
D
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 170 mm × 46 mm × 16 mm
Weight .... 0.7 kg

Audio
Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
.... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ωl oad, both channels driven)
Load impedance .... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
.... 2.0 V
Loudness contour .... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume:–30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency .... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range .... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope ....–12 dB/oct,–24 dB/oct
Gain .... +6 dB to –24 dB
Phase ....Normal/Reverse

USB
USB standard specification
.... USB 2.0 full speed
Maximum current supply
.... 1 A
USB Class .... MSC (Mass Storage Class)
File system....................... FAT12, FAT16, FAT32
MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .... Linear PCM & MS ADPCM
(Non-compressed)

FM tuner
Frequency range .... 87.5 MHz to 108.0 MHz
Usable sensitivity .... 9 dBf (0.8 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio .... 72 dB (IEC-A network)

MW tuner
Frequency range .... 531 kHz to 1 602 kHz
Usable sensitivity .... 25 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IEC-A network)

LW tuner
Frequency range .... 153 kHz to 281 kHz
Usable sensitivity .... 28 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IEC-A network)

Bluetooth
Version .... Bluetooth 3.0 certified
Output power .... +4 dBm Maximum
(Power class 2)

Note
Specifications and the design are subject to modifications without notice.

• **MVH-X360BT/XINUC**

General

Power source ....14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ....Negative type
Maximum current consumption
.... 10.0 A
Backup current................. 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis .... 178 mm × 50 mm × 165 mm (7 in. × 2 in. × 6-1/2 in.)
Nose .... 188 mm × 58 mm × 16 mm (7-3/8 in.× 2-1/4 in.× 5/8 in.)
D
Chassis .... 178 mm × 50 mm × 165 mm (7 in.× 2 in.× 6-1/2 in.)
Nose .... 170 mm × 46 mm × 16 mm (6-3/4 in.× 1-3/4 in.× 5/8 in.)
Weight .... 0.7 kg (1.5 lbs)

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
.... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance .... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
.... 2.0 V
Loudness contour .... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume:–30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency .... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range .... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .... –12 dB/oct, –24 dB/oct
Gain .... +6 dB to –24 dB
Phase .... Normal/Reverse

USB

USB standard specification
.... USB 2.0 full speed
Maximum current supply
.... 1 A
USB Class .... MSC (Mass Storage Class)
File system...................... FAT12, FAT16, FAT32
MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format ....Linear PCM & MS ADPCM (Non-compressed)

FM tuner

Frequency range .... 87.9 MHz to 107.9 MHz
Usable sensitivity .... 9 dBf (0.8 µV/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio .... 72 dB (IHF-A network)

AM tuner

Frequency range .... 530 kHz to 1 710 kHz
Usable sensitivity .... 25 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IHF-A network)

Bluetooth

Version .... Bluetooth 3.0 certified
Output power .... +4 dBm Maximum
(Power class 2)

CEA2006 Specifications

Power output .... 14 W RMS × 4 Channels (4 Ω and ≦ 1 % THD+N)
S/N ratio .... 91 dBA (reference: 1 W into 4 Ω)

Note

Specifications and the design are subject to modifications without notice.

A

- **MVH-X365BT/XINCS**

General

Rated power source ....14.4 V DC
(allowable voltage range:
12.0 V to 14.4 V DC)
Grounding system .... Negative type
Maximum current consumption
.... 10.0 A
Backup current................. 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 188 mm × 58 mm × 15 mm
D
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 170 mm × 46 mm × 16 mm
Weight .... 0.7 kg

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
.... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance .... 4 Ω(4 Ω to 8 Ω allowable)
Preout maximum output level
.... 2.0 V
Loudness contour .... +10 dB(100 Hz), +6.5 dB (10 kHz) (volume:–30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency .... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range .... ±12 dB (2 dBstep)
Subwoofer (mono):
Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .... –12 dB/oct, –24 dB/oct
Gain .... +6 dB to –24 dB
Phase .... Normal/Reverse

USB

USB standard specification
.... USB 2.0 full speed
Maximum current supply
.... 1 A
USB Class .... MSC(Mass Storage Class)
File system...................... FAT12, FAT16, FAT32

MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format ....Linear PCM & MS ADPCM
(Non-compressed)

FM tuner

Frequency range ....87.5 MHz to 108.0 MHz
Usable sensitivity .... 9 dBf(0.8 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio .... 72 dB (IEC-A network)

AM tuner

Frequency range .... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity .... 25 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IEC-A network)

Bluetooth

Version .... Bluetooth 3.0 certified
Output power .... +4 dBm Maximum
(Power class 2)

Note

Specifications and the design are subject to modifications without notice.

B C D E F

• **MVH-X365BT/XINGS**

General

Rated power source .... 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system .... Negative type
Maximum current consumption
.... 10.0 A
Backup current.................. 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 188 mm × 58 mm × 15 mm
D
Chassis .... 178 mm × 50 mm × 165 mm
Nose .... 170 mm × 46 mm × 16 mm
Weight .... 0.7 kg

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
.... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance .... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
.... 2.0 V
Loudness contour .... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency .... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range .... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .... –12 dB/oct, –24 dB/oct
Gain .... +6 dB to –24 dB
Phase .... Normal/Reverse

USB

USB standard specification
.... USB 2.0 full speed
Maximum current supply
.... 1 A
USB Class .... MSC (Mass Storage Class)
File system....................... FAT12, FAT16, FAT32

MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .... Linear PCM & MS ADPCM
(Non-compressed)

FM tuner

Frequency range .... 87.5 MHz to 108.0 MHz
Usable sensitivity .... 9 dBf (0.8 µV/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio .... 72 dB (IEC-A network)

MW tuner/AM tuner

Frequency range .... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity .... 25 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IEC-A network)

SW tuner

Frequency range .... 2 300 kHz to 7 735 kHz
(2 300 kHz to 2 495 kHz,
2 940 kHz to 4 215 kHz,
4 540 kHz to 5 175 kHz,
5 820 kHz to 6 455 kHz,
7 100 kHz to 7 735 kHz)
9 500 kHz to 21 975 kHz
(9 500 kHz to 10 135 kHz,
11 580 kHz to 12 215 kHz,
13 570 kHz to 13 870 kHz,
15 100 kHz to 15 735 kHz,
17 500 kHz to 17 985 kHz,
18 015 kHz to 18 135 kHz,
21 340 kHz to 21 975 kHz)
Usable sensitivity .... 28 µV (S/N: 20 dB)
Signal-to-noise ratio .... 62 dB (IEC-A network)

Bluetooth

Version .... Bluetooth 3.0 certified
Output power .... +4 dBm Maximum
(Power class 2)

Note

Specifications and the design are subject to modifications without notice.

2.2 DISC/CONTENT FORMAT

Made for iPod iPhone

Bluetooth®

The *Bluetooth®* word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by PIONEER CORPORATION is under license.
Other trademarks and trade names are those of their respective owners.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

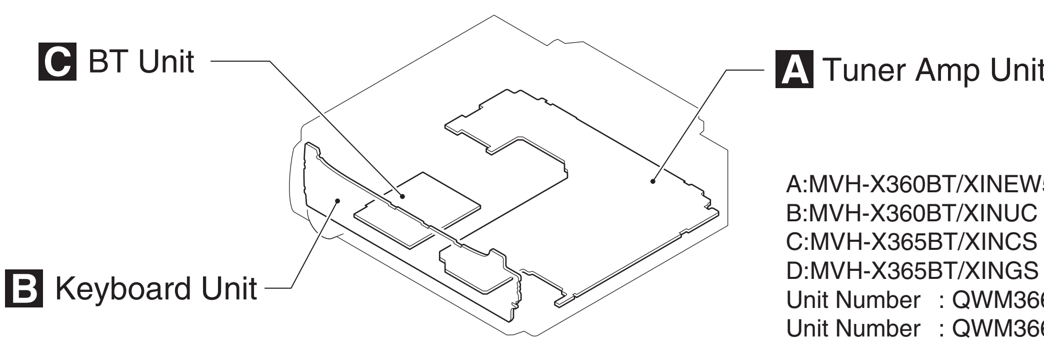
To keep the product quality after servicing, please confirm following check points.

No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, audio and operations must be normal.
2	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.
3		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio:

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

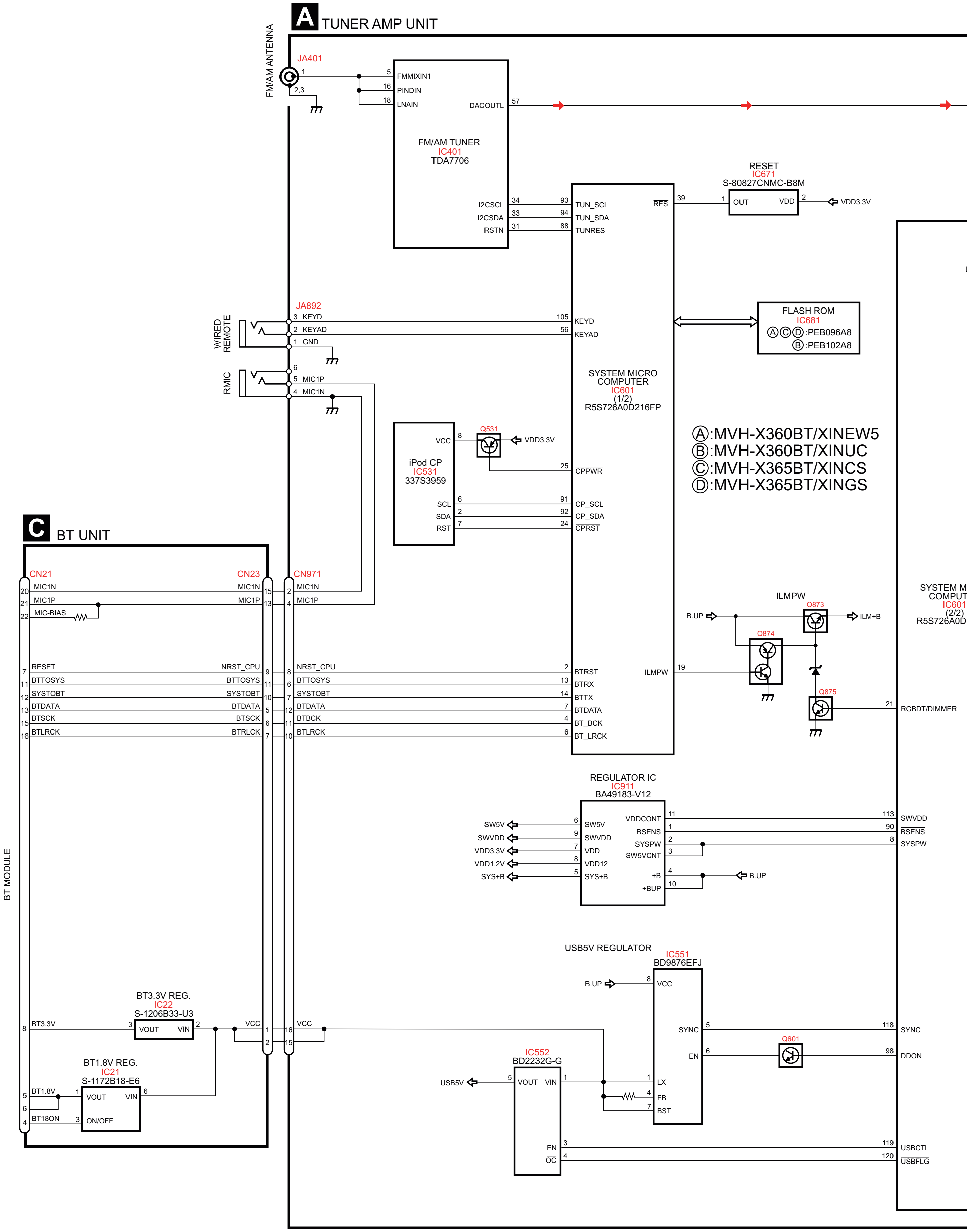
3.2 PCB LOCATIONS

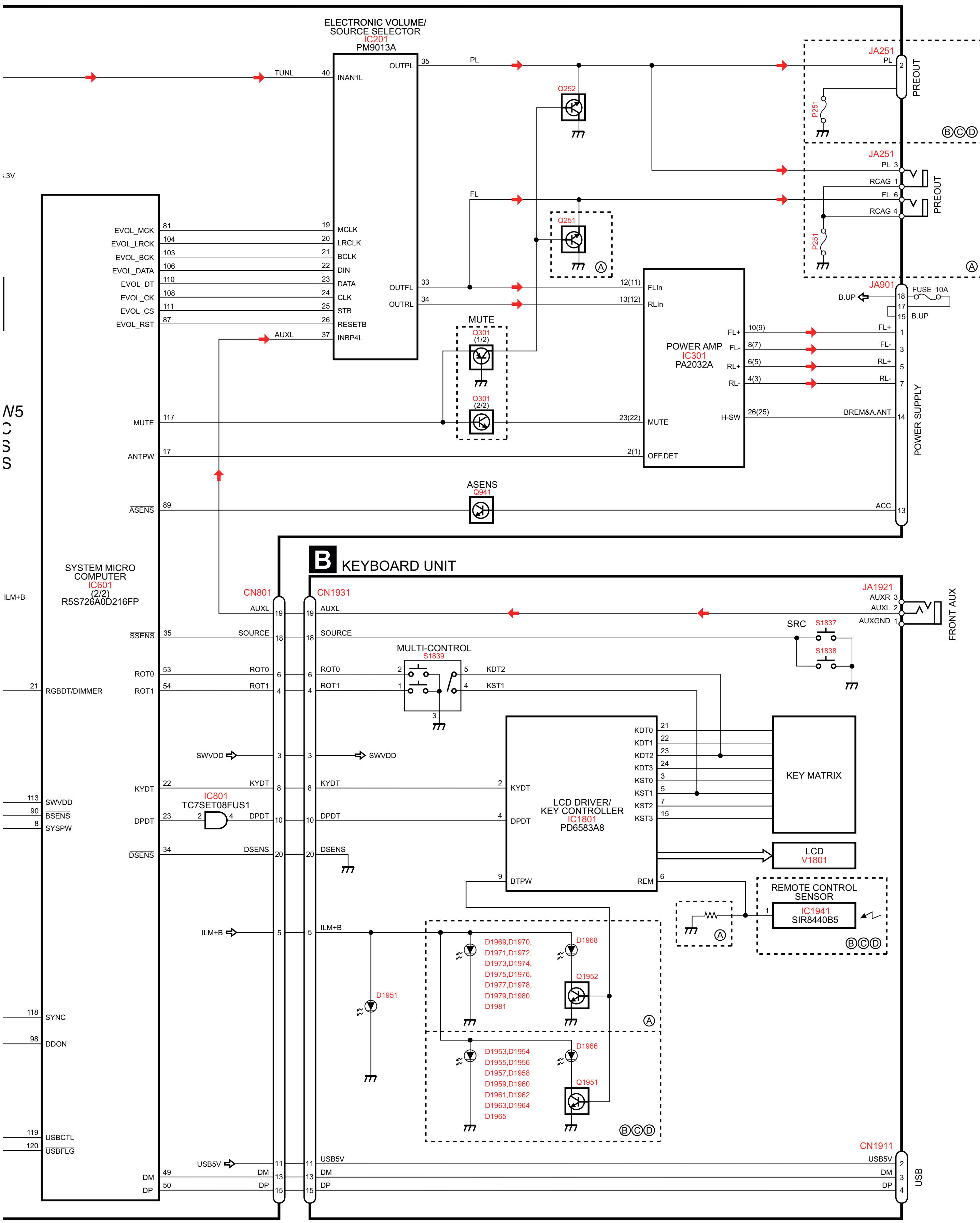


A:MVH-X360BT/XINEW5
B:MVH-X360BT/XINUC
C:MVH-X365BT/XINCS
D:MVH-X365BT/XINGS

Unit Number	: QWM3665(A)
Unit Number	: QWM3664(B)
Unit Number	: QWM3666(C)
Unit Number	: QWM3667(D)
Unit Name	: Tuner Amp Unit
Unit Number	: (A)
Unit Number	: (B,C,D)
Unit Name	: Keyboard Unit
Unit Number	: QWM3750
Unit Name	: BT Unit

4. BLOCK DIAGRAM

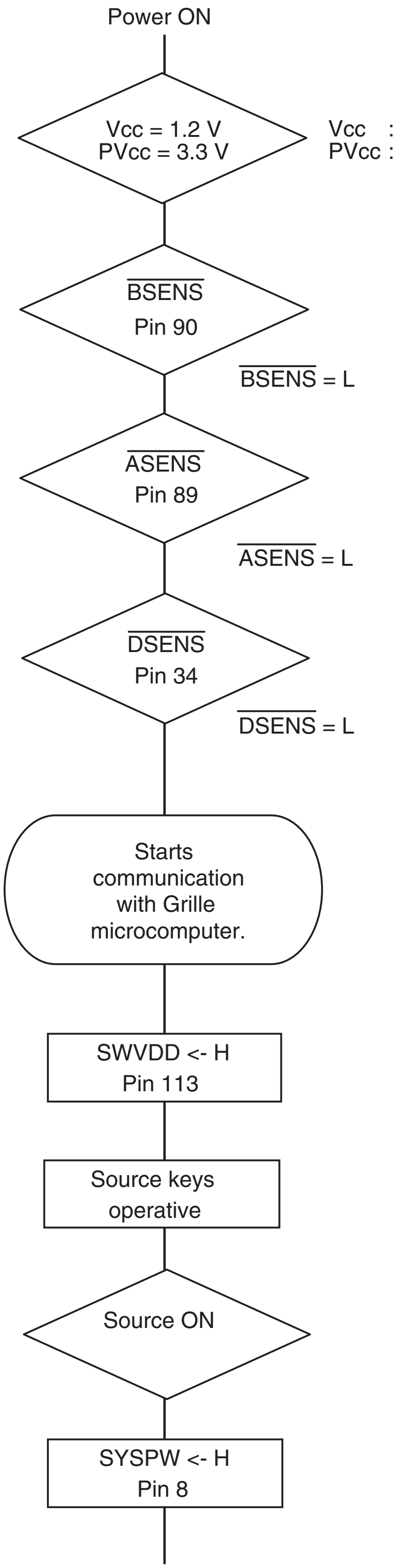


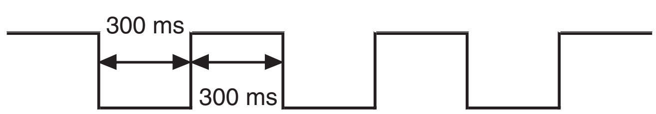


ELECTRONIC VOLUME/
SOURCE SELECTOR
IC201
PM9013A
TUNL
INAN1L
OUTPL
PL
Q252
JA251
PREOUT
P251
FL
Q251
RCAG
OUTFL
OUTRL
MCLK
LRCLK
BCLK
DIN
DATA
CLK
STB
RESETB
INBP4L
AUXL
EVOL_MCK
EVOL_LRCK
EVOL_BCK
EVOL_DATA
EVOL_DT
EVOL_CK
EVOL_CS
EVOL_RST
MUTE
Q301
(1/2)
(2/2)
POWER AMP
IC301
PA2032A
FLIn
RLIn
FL+
FL-
RL+
RL-
H-SW
MUTE
OFF.DET
JA901
FUSE 10A
B.UP
BREM&A.ANT
POWER SUPPLY
ANTPW
ASENS
Q941
ACC
SYSTEM MICRO
COMPUTER
IC601
(2/2)
R5S726A0D216FP
B KEYBOARD UNIT
CN801
CN1931
JA1921
AUXR
AUXL
AUXGND
FRONT AUX
SRC
S1837
S1838
SOURCE
MULTI-CONTROL
S1839
ROT0
ROT1
KDT2
KST1
RGBDT/DIMMER
SWVDD
KYDT
IC801
TC7SET08FUS1
DPDT
LCD DRIVER/
KEY CONTROLLER
IC1801
PD6583A8
KDT0
KDT1
KDT2
KDT3
KST0
KST1
KST2
KST3
KEY MATRIX
LCD
V1801
BTPW
REM
REMOTE CONTROL
SENSOR
IC1941
SIR8440B5
SWVDD
BSENS
SYSPW
DSENS
ILM+B
D1969,D1970,
D1971,D1972,
D1973,D1974,
D1975,D1976,
D1977,D1978,
D1979,D1980,
D1981
D1968
Q1952
D1951
D1953,D1954
D1955,D1956
D1957,D1958
D1959,D1960
D1961,D1962
D1963,D1964
D1965
D1966
Q1951
SYNC
DDON
USBCTL
USBFLG
USB5V
DM
DP
CN1911
USB

5. DIAGNOSIS

5.1 OPERATIONAL FLOWCHART





In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300 msec, the oscillator may be defective.

Completes power-on operation.
(After that, proceed to each source operation)

5.2 ERROR CODE LIST

Common

AMP ERROR

This unit fails to operate or the speaker connection is incorrect; the protective circuit is activated.
Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

USB storage device/iPod

FORMAT READ

Sometimes there is a delay between the start of playback and when you start to hear any sound.
Wait until the message disappears and you hear sound.

NO AUDIO

There are no songs.
Transfer the audio files to the USB storage device and connect.

The connected USB storage device has security enabled.
Follow the USB storage device instructions to disable the security.

SKIPPED

The connected USB storage device contains DRM protected files.
The protected files are skipped.

PROTECT

All the files on the connected USB storage device are embedded with DRM.
Replace the USB storage device.

N/A USB

The connected USB device is not supported by this unit.
! Connect a USB Mass Storage Class compliant device.
! Disconnect your device and replace it with a compatible USB storage device.

CHECK USB

The USB connector or USB cable has short-circuited.
Check that the USB connector or USB cable is not caught in something or damaged.

CHECK USB

The connected USB storage device consumes more than maximum allowable current.
Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect only compliant USB storage devices.

CHECK USB

The iPod operates correctly but does not charge.
Make sure the connection cable for the iPod has not shorted out (e.g., not caught in metal objects). After checking, turn the ignition switch OFF and back ON, or disconnect the iPod and reconnect.

ERROR-19

Communication failed.
Perform one of the following operations.
–Turn the ignition switch OFF and back ON.
–Disconnect the USB storage device.
–Change to a different source.
Then, return to the USB source.

iPod failure.
Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

ERROR-23

USB storage device was not formatted with FAT12, FAT16 or FAT32.
USB storage device should be formatted with FAT12, FAT16 or FAT32.

ERROR-16

The iPod firmware version is old.
Update the iPod version.

iPod failure.
Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

STOP

There are no songs in the current list.
Select a list that contains songs.

NOT FOUND

No related songs.
Transfer songs to the iPod.

Bluetooth device

ERROR-10

The power failed for the Bluetooth module of this unit.
Turn the ignition switch OFF and then to ACC or ON.
If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Application

NO BT DEVICE GO TO BT MENU TO REGISTER

No Bluetooth device found.
Follow the instructions that appear on the screen.

CONN. FAILED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

DISCONNECTED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

CHECK APP

Connection to the application failed.
Follow the instructions that appear on the screen.

START UP APP

The application has not started running yet.
Follow the instructions that appear on the screen.

Pandora (/GS, /UC)

ERROR-19

Communication failed.
Disconnect the cable from the device. Once the device's main menu is displayed, reconnect the device and reset it.

START UP APP

The Pandora application has not started running yet.
Start up the Pandora application.

INOPERABLE

The operation was disabled.
Run the same command for another track.

TRY AGAIN

Unable to save thumb rating.
Unable to save BookMark.
Unable to add station.
Try again later.

MAINTENANCE

Pandora system is undergoing maintenance.
Try again later.

SKIP LIMIT

Skip limit reached.
! Do not exceed the skip limit.
! Due to music licensing restrictions, Pandora limits the total number of skips per hour.

CHECK APP

This version of the Pandora application is not supported.
Connect a device that has a compatible version of the Pandora application installed.

CHECK DEVICE

Device error message displayed in Pandora application.
Unable to play music from Pandora.
Please check your connected device.

NO STATION

No station found.
Create a station in the Pandora application on your connected device.

NO ACTIVE ST

No station selected.
Select a station.

NO BT DEVICE GO TO BT MENU TO REGISTER

No Bluetooth device found.
Follow the instructions that appear on the screen.

CONN. FAILED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

CHECK APP PRESS BAND KEY TO RETRAY

Connection to the Pandora application failed.
Follow the instructions that appear on the screen.

DISCONNECTED PRESS BAND KEY TO RETRAY

Bluetooth connection lost.
Follow the instructions that appear on the screen.

STATION FULL

A new station cannot be added.
Delete an old station to open a spot for a new one.

CAN.T DELETE

The station could not be deleted.
Run the same command for another station.

NO NETWORK

The connected device is out of area.
Connect the connected device to a network.

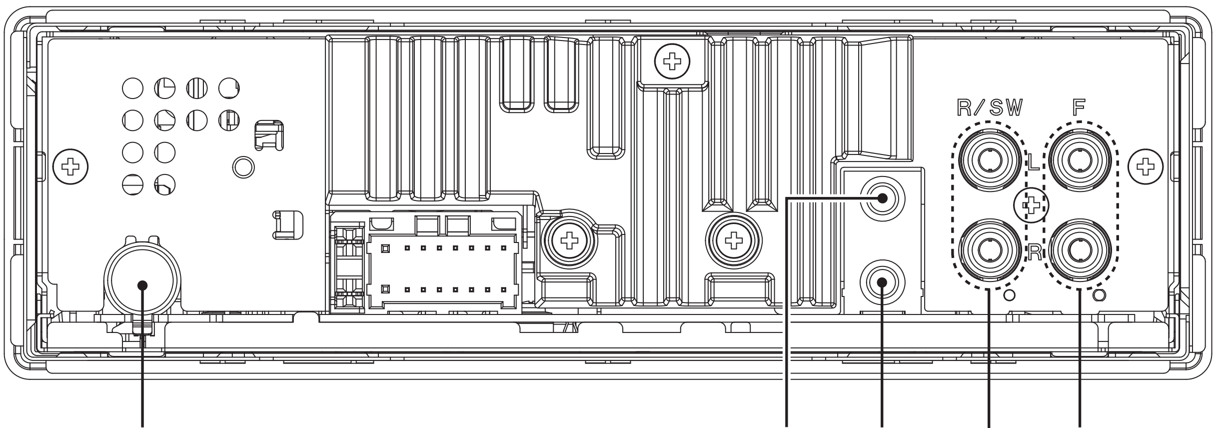
NO SERVICE

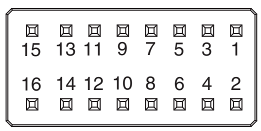
The connected device is out of area.
Connect the connected device to a network.

CAN.T PLAY

The operation was disabled.
Run the same command for another station.

5.3 CONNECTOR FUNCTION DESCRIPTION



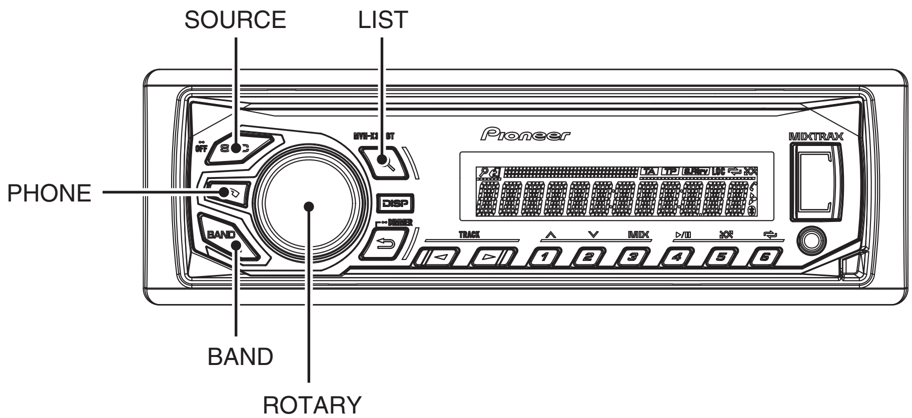


1	FL+	9	NC
2	FR+	10	NC
3	FL-	11	NC
4	FR-	12	NC
5	RL+	13	ACC
6	RR+	14	B.REM
7	RL-	15	B.UP
8	RR-	16	GND

6. SERVICE MODE
6.1 DISPLAY TEST MODE 1

[How to enter Test mode]

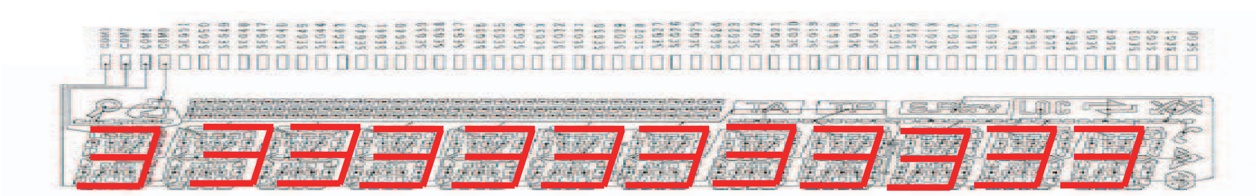
Press and hold "PHONE" and "LIST" buttons together, and turn BUP and ACC on.



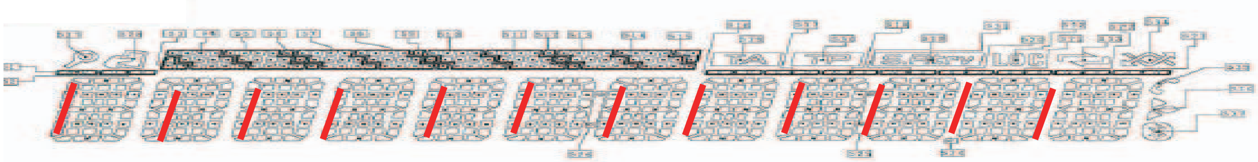
		Grille condition	
Conf. item	Operate	Show LCD	ILM
All light up	PHONE + LIST	Draw 1	ILM(1)
All light off	SOURCE	No light Draw2	No light
Conf. LCD pattern 1 (* And change ILM color)	BAND	Draw 3	ILM(2) (If not have, ILM(1) light on)
Conf. LCD pattern 2	ROTARY center	Draw 4	ILM(1)

Drawings Style

Draw1 ALL light up
Draw2 ALL light off
Draw3



Draw4



6.2 DISPLAY TEST MODE 2

The information such as the system microcomputer version is checked.

[How to enter Test mode]

Press and hold "1" and "3" buttons together, and turn BUP and ACC on.

[Operation key]

Operation key	Processing	Remarks
① + ③	Enter display test mode Switch to next test mode	

[Test items]

Start display test mode.
Press and hold "1" and "3" buttons together, and turn BUP and ACC on.

Step	Key Illumination	Icon
(Initial condition *)	Off	All off
(Entering test mode)	On (an initial value)	All off
System Version information is displayed.	On (an initial value or setting value of default menu)	All off
Display is normally updated	On (an initial value or setting value of default menu)	On (lighting condition of normal times)
Display update is stopped	On (an initial value or setting value of default menu)	On (state when entering test mode)

* Initial condition

System Version information is displayed.

S $ $ $ $ # # #

$ PD number — For PEA010A, "010A" is displayed

System microcomputer version — For Ver.7.01, "701" is displayed

Switching to next display by pressing " ① " + " ③ " buttons together.

Display is normally updated

Product operation is performed as usual, in appearance.

Switching to next display by pressing " ① " + " ③ " buttons together.

Display update is stopped

The screen gets still when entering this item.

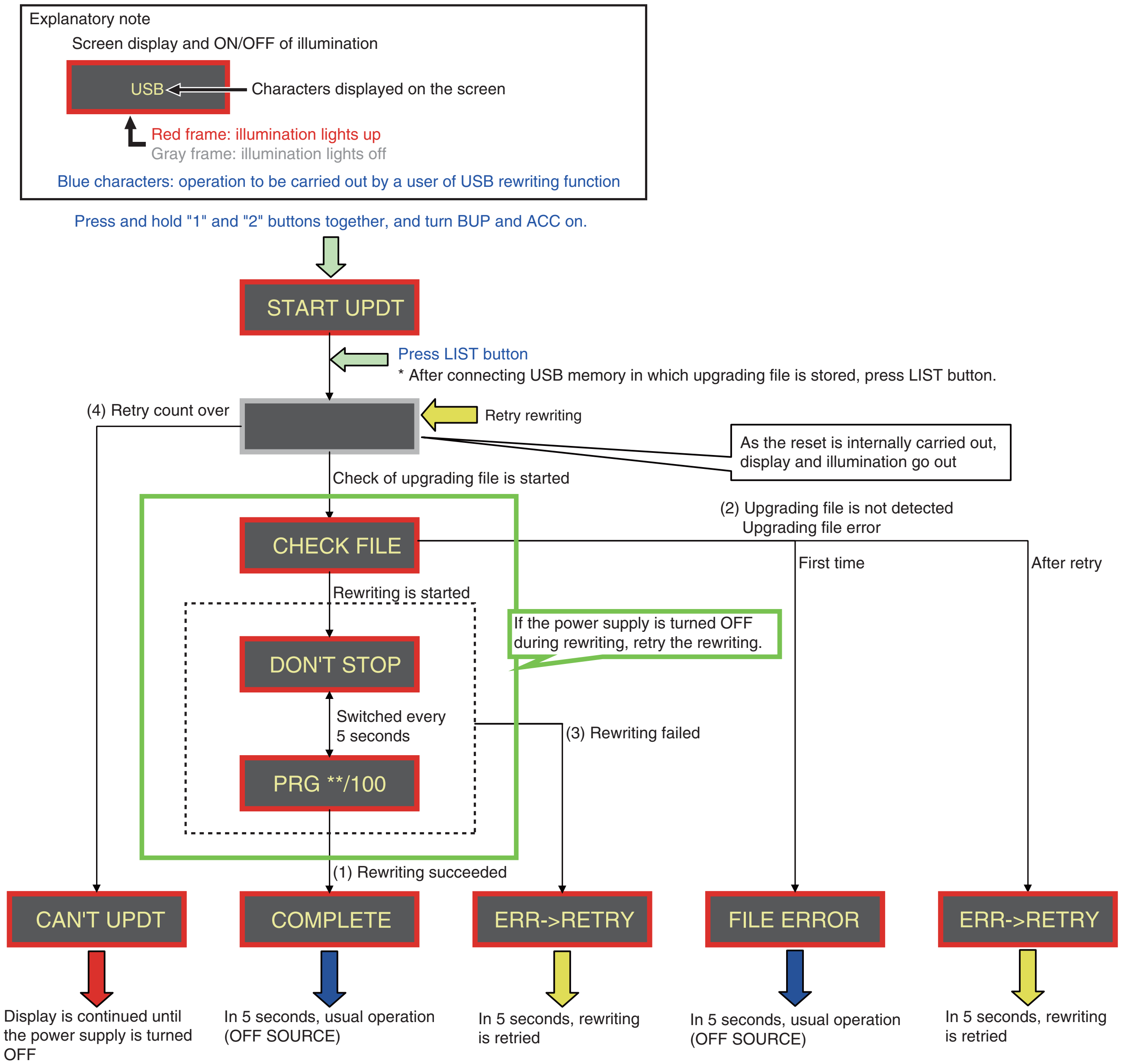
Switching to next display by pressing " ① " + " ③ " buttons together.

6.3 SOFTWARE VERSION UP METHOD

Overview
This mode is used for upgrading the MCU software of system using USB memory.

How to enter in USB rewriting mode
Press and hold "1" and "2" buttons together, and turn BUP and ACC on.

USB rewriting operation flow



Result of rewriting

(1) Rewriting succeeded	Displayed when USB rewriting is normally terminated. In 5 seconds, usual operation (OFF SOURCE) is started.
(2) Upgrading file error Upgrading file is not detected	Displayed when there is no upgrading file in USB memory or the data of upgrading file is different. In 5 seconds, usual operation (OFF SOURCE) is started. If the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried, the rewriting is failed. In 5 seconds, rewriting is retried.
(3) Rewriting failed	Displayed when the writing of upgrading file in serial Flash is not normally terminated. Or, displayed if the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried. In 5 seconds, rewriting is retried.
(4) Retry count over	Displayed when the retry becomes unavailable because the retry count is exceeded. The display is continued until the power supply is turned OFF. If the power supply is turned ON again, the display is not changed. The upgrading using USB is disabled, so it is necessary to write programs in serial Flash using E10A.

7. DISASSEMBLY

While the photograph shown is slightly different from this model in shape, the disassembly procedure is the same.

● Removing the Panel Assy (Fig.1)

1. Release the two latches.
2. Release the two latches and then remove the Panel Assy.

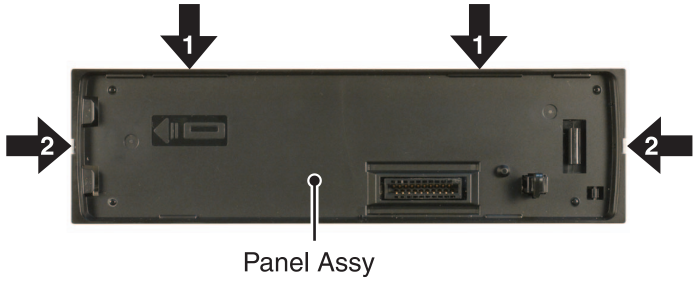
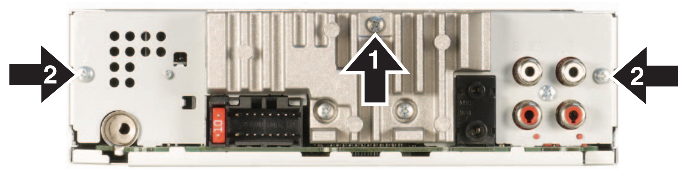


Fig.1

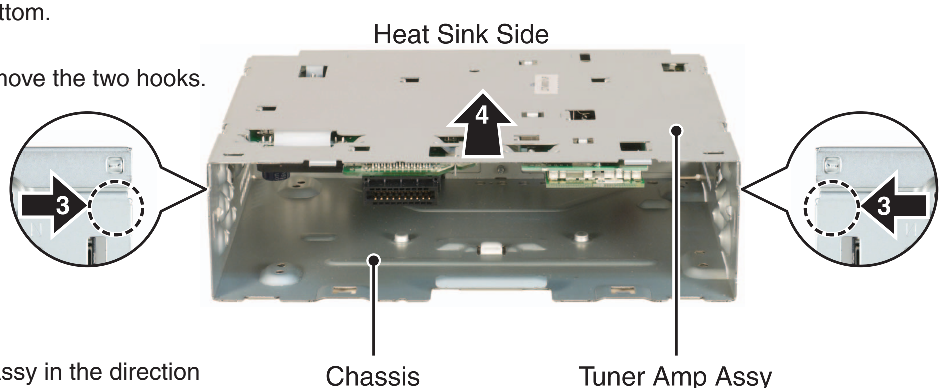
● Removing the Tuner Amp Assy (Fig.2)

1. Remove the screw.
2. Remove the two screws.



The Chassis side is made a bottom.

3. Push the area and remove the two hooks.



4. Slide the Tuner Amp Assy in the direction of the arrow and then remove the Tuner Amp Assy.

Fig.2

● Removing the Tuner Amp Unit and the BT Unit (Fig.3)

1. Disconnect the connector.
2. Remove the two screws.
3. Remove the two screws and then remove the Tuner Amp Unit.
4. Remove the screw and then remove the BT Unit.

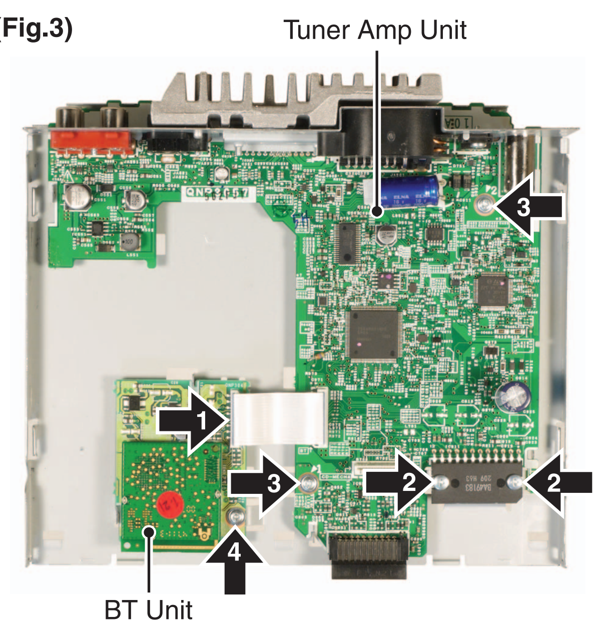


Fig.3

● Disassembling the Panel Part (Fig.4, 5)

1. Remove the arm while bending the rib of the panel upward.

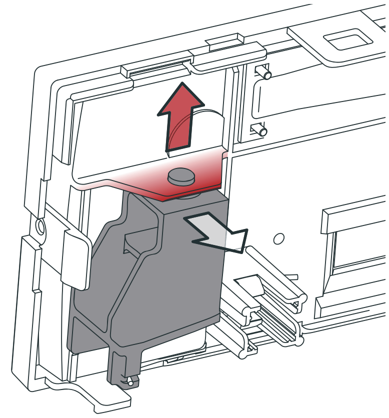


Fig.4

2. Press the upside hook and the bottom side hook of the button at the same time, and pull out the button.

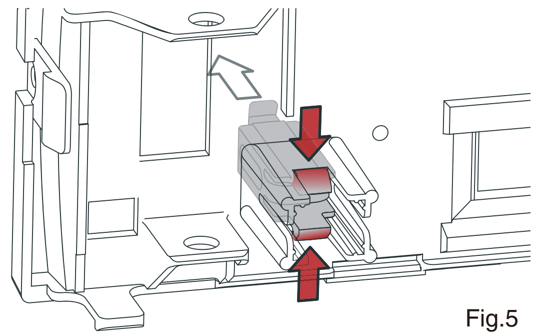


Fig.5

● Assembling the Panel Part (Fig.6, 7, 8)

1. Attach the button from the front side of the panel.

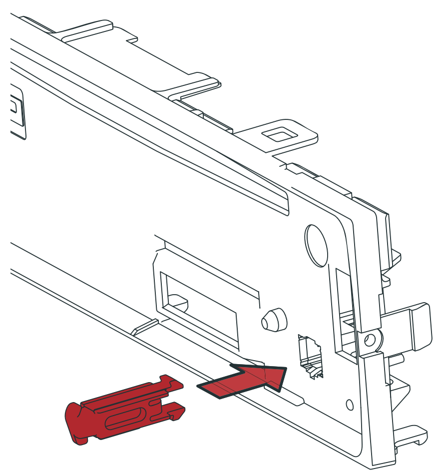


Fig.6

2. Attach the spring to the arm as shown in the figure.

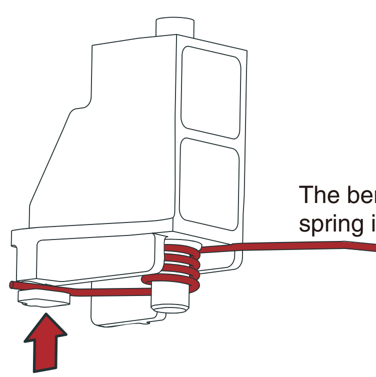


Fig.7

3. Fit the spring in the groove at the position shown in the figure.
4. Fit the boss on the lower side of the arm in the lower hole of the panel, and then warp the rib on the panel in the direction shown in the figure and fit the boss of the arm in the panel.

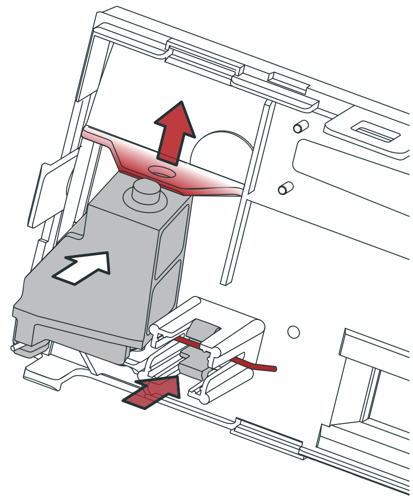


Fig.8

8. EACH SETTING AND ADJUSTMENT

8.1 PCL OUTPUT CONFIRMATION

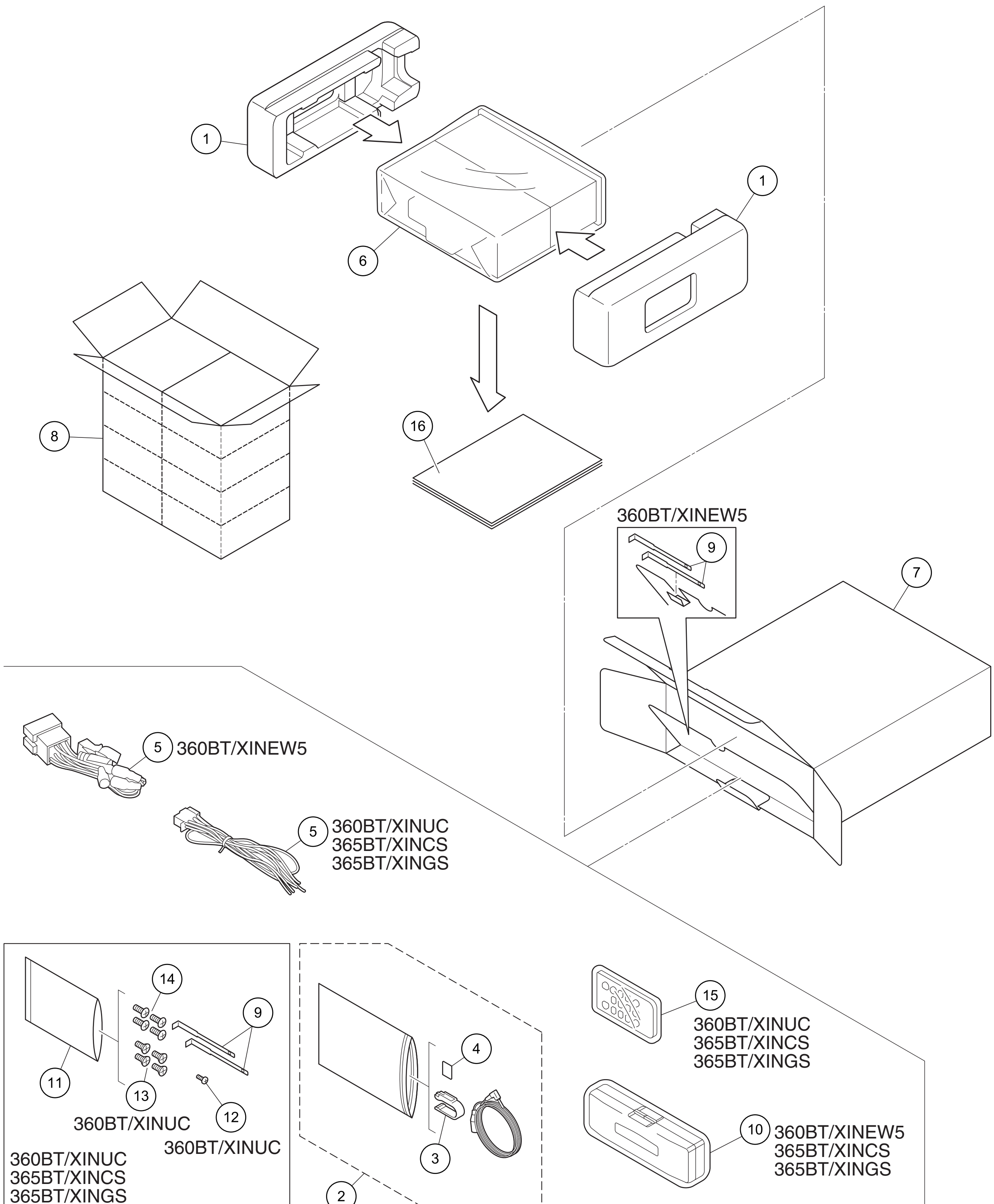
● PCL Output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN IC601(Pin 99) terminal to H.
The clock signal is output from the PCL terminal IC601(Pin115).
The frequency of the clock signal is 600 kHz that is divided by 20th of the oscillation frequency of X601 (12MHz).
The clock signal should be 600 kHz(- 25 Hz, + 25 Hz).
If the clock signal is out of the range, the X'tal (X601) should be replaced with new one.

9. EXPLODED VIEWS AND PARTS LIST

NOTES : • *Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screw adjacent to▽ mark on the product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)*

9.1 PACKING



(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Protector	CHP4595
	2	Microphone Assy	CPM1083
	3	Holder	CZN7192
	4	Cushion	CZN7193
	5	Cord Assy	See Contrast table (2)
	6	Polyethylene Bag	See Contrast table (2)
	7	Unit Box	See Contrast table (2)
	8	Contain Box	See Contrast table (2)
	9	Handle	QNC3021
	10	Case Assy	See Contrast table (2)
	11	Polyethylene Bag	See Contrast table (2)
	12	Screw	See Contrast table (2)
	13	Screw	See Contrast table (2)
	14	Screw	See Contrast table (2)
	15	Card Remote Control Unit	See Contrast table (2)
	16-1	Owner's Manual	See Contrast table (2)
*	16-2	Warranty Card	See Contrast table (2)

(2) CONTRAST TABLE

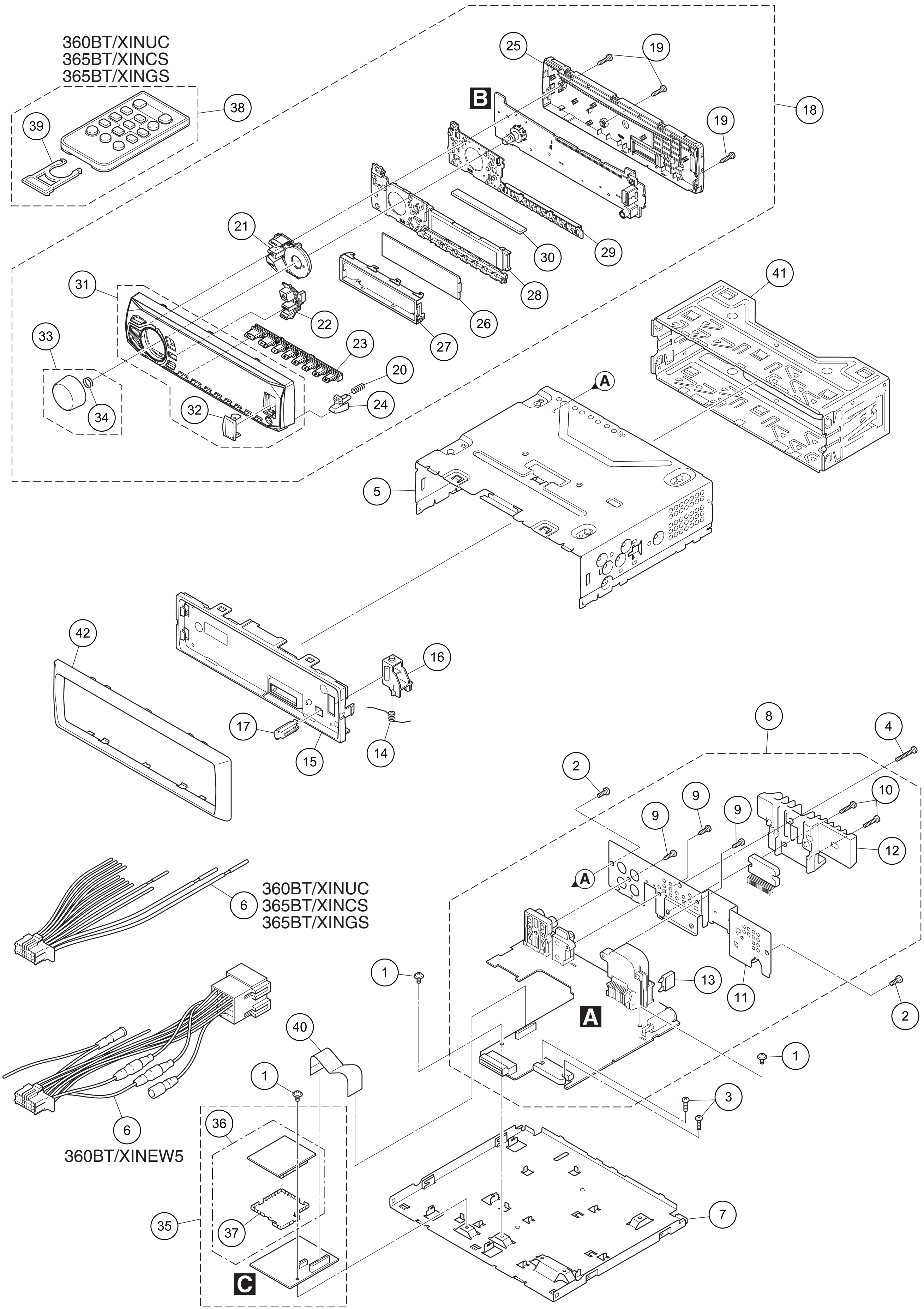
MVH-X360BT/XINEW5, MVH-X360BT/XINUC, MVH-X365BT/XINCS and MVH-X365BT/XINGS are constructed the same except for the following:

Mark	No.	Description	MVH-X360BT /XINEW5	MVH-X360BT /XINUC	MVH-X365BT /XINCS	MVH-X365BT /XINGS
	5	Cord Assy	QDP3014	CDP1480	CDP1480	CDP1480
	6	Polyethylene Bag	QEG3001	CEG1173	QEG3001	QEG3001
	7	Unit Box	QHG3531	QHG3539	QHG3532	QHG3533
	8	Contain Box	QHL3531	QHL3539	QHL3532	QHL3533
	10	Case Assy	QXA3129	Not used	QXA3129	QXA3129
	11	Polyethylene Bag	Not used	CEG1160	CEG1160	CEG1160
	12	Screw	Not used	BPZ20P060FTC	Not used	Not used
	13	Screw	Not used	CRZ50P090FTC	Not used	Not used
	14	Screw	Not used	TRZ50P080FTC	TRZ50P080FTC	TRZ50P080FTC
	15	Card Remote Control Unit	Not used	QXE1044	QXE1044	QXE1044
	16-1	Owner's Manual	QRD3211	QRD3221	QRD3212	QRD3213
*	16-2	Warranty Card	CRY1376	QRY3001	Not used	Not used

Owner's Manual,Installation Manual

Part No.	Language
QRD3211	English, French, Italian, Spanish(Espanol), German, Dutch, Russian
QRD3212	English, Spanish(Espanol), Portuguese(B)
QRD3213	English, Traditional Chinese, Arabic, Persian
QRD3221	English, French, Spanish(Espanol)

9.2 EXTERIOR



360BT/XINUC
365BT/XINCS
365BT/XINGS
38
39
25
19
19
18
B
21
30
29
31
22
28
26
41
33
23
27
20
24
A
34
32
5
42
16
17
15
14
8
4
2
9
9
9
10
12
A
6
360BT/XINUC
365BT/XINCS
365BT/XINGS
1
13
11
2
A
40
1
1
3
6
360BT/XINEW5
36
7
35
37
C

(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	ASZ26P050FTC
	2	Screw	BSZ26P060FTC
	3	Screw	BSZ26P080FTC
	4	Screw	BSZ26P120FTC
	5	Chassis	CNA3181
	6	Cord Assy	See Contrast table (2)
	7	Case	QNB3014
	8	Tuner Amp Unit	See Contrast table (2)
	9	Screw	BPZ26P080FTC
	10	Screw	BSZ26P120FTC
	11	Holder	See Contrast table (2)
	12	Heat Sink	See Contrast table (2)
⚠	13	Fuse (10 A)	YEK5001
	14	Spring	QBH3001
	15	Panel	QNS3289
	16	Arm	QNV3025
	17	Button	QNV3026
	18	Detachable Grille Assy	See Contrast table (2)
	19	Screw	BPZ20P100FTC
	20	Spring	CBH2210
	21	Button (SRC, BAND)	QAC3120

Mark	No.	Description	Part No.
	22	Button (DISP)	QAC3125
	23	Button (< > 1-6)	QAC3126
	24	Button (DETACH)	QAC3127
	25	Cover	QNS3567
	26	Segment LCD (V1801)	CAW2024
	27	Holder	QNC3067
	28	Lighting Conductor	QNV3069
	29	Contact Rubber	QNV3070
	30	Rubber Connector	QNV3071
	31	Grille Unit	See Contrast table (2)
	32	Door	QAT3011
	33	Knob Unit	See Contrast table (2)
	34	Spring	YBL5010
	35	BT Unit	QWM3750
	36	BT Module	YWX5044
	37	Shield Case	YNC5123
	38	Card Remote Control Unit	See Contrast table (2)
	39	Cover	See Contrast table (2)
	40	FFC	QDE3028
	41	Holder	QNC3020
	42	Panel	QNS3568

(2) CONTRAST TABLE

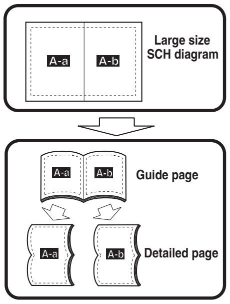
MVH-X360BT/XINEW5, MVH-X360BT/XINUC, MVH-X365BT/XINCS and MVH-X365BT/XINGS are constructed the same except for the following:

Mark	No.	Description	MVH-X360BT /XINEW5	MVH-X360BT /XINUC	MVH-X365BT /XINCS	MVH-X365BT /XINGS
	6	Cord Assy	QDP3014	CDP1480	CDP1480	CDP1480
	8	Tuner Amp Unit	QWM3665	QWM3664	QWM3666	QWM3667
	11	Holder	QNC3053	QNC3054	QNC3054	QNC3054
	12	Heat Sink	QNR3010	QNR3010	QNR3010	QNR3002
	18	Detachable Grille Assy	QXA3858	QXA4069	QXA3859	QXA4037
	31	Grille Unit	QXA3890	QXA4070	QXA3891	QXA3869
	33	Knob Unit	QXA3671	QXA3670	QXA3670	QXA3670
	38	Card Remote Control Unit	Not used	QXE1044	QXE1044	QXE1044
	39	Cover	Not used	CNS7068	CNS7068	CNS7068

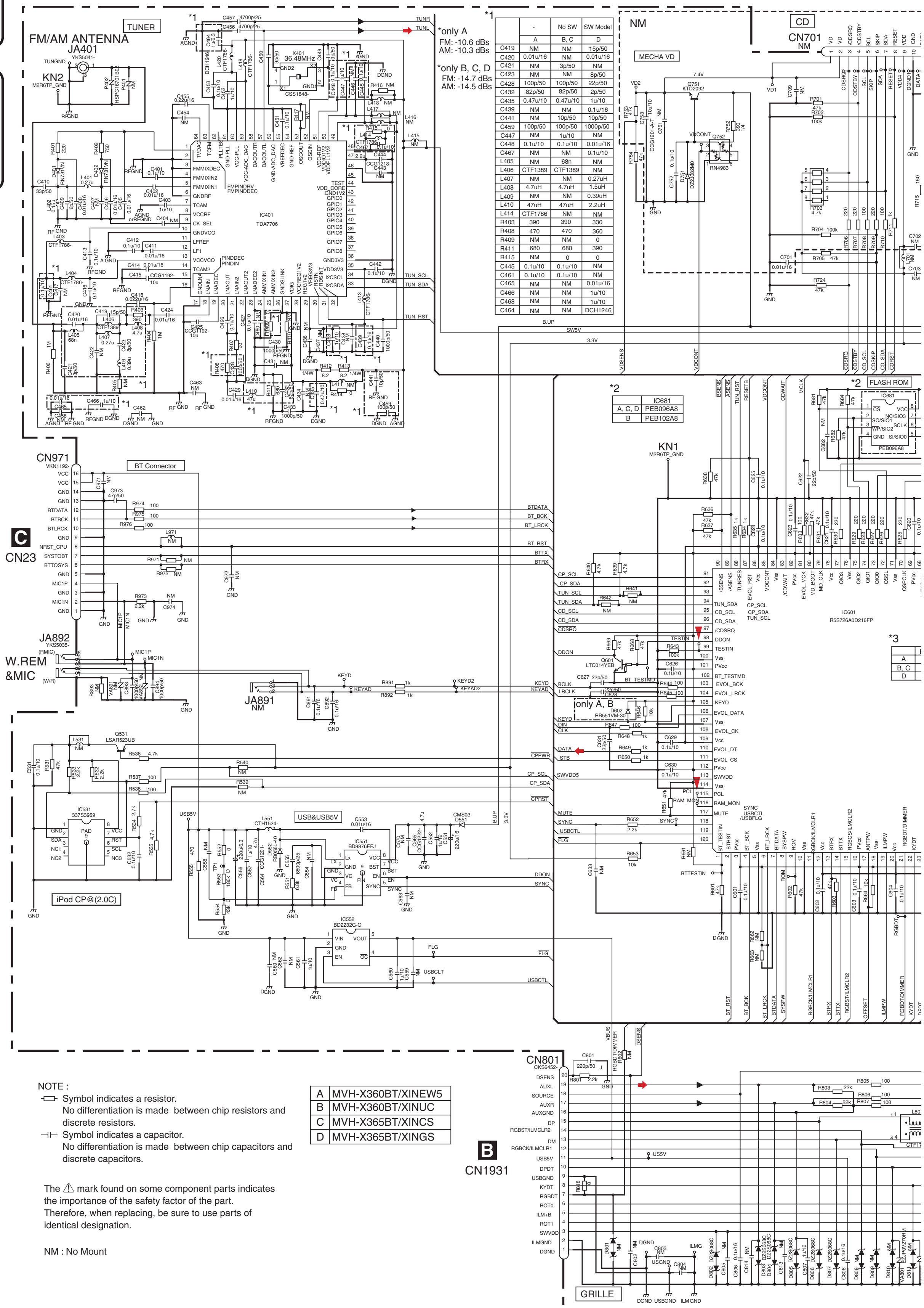
10. SCHEMATIC DIAGRAM

10.1 TUNER AMP UNIT (GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



A-a



*1

	-	No SW	SW Model
	A	B, C	D
C419	NM	NM	15p/50
C420	0.01u/16	NM	0.01u/16
C421	NM	3p/50	NM
C423	NM	NM	8p/50
C428	100p/50	100p/50	22p/50
C432	82p/50	82p/50	2p/50
C435	0.47u/10	0.47u/10	1u/10
C439	NM	NM	0.1u/16
C441	NM	10p/50	10p/50
C459	100p/50	100p/50	1000p/50
C447	NM	1u/10	NM
C448	0.1u/10	0.1u/10	0.01u/16
C467	NM	NM	0.1u/10
L405	NM	68n	NM
L406	CTF1389	CTF1389	NM
L407	NM	NM	0.27uH
L408	4.7uH	4.7uH	1.5uH
L409	NM	NM	0.39uH
L410	47uH	47uH	2.2uH
L414	CTF1786	NM	NM
R403	390	390	330
R408	470	470	360
R409	NM	NM	0
R411	680	680	390
R415	NM	0	0
C445	0.1u/10	0.1u/10	NM
C461	0.1u/10	0.1u/10	NM
C465	NM	NM	0.01u/16
C466	NM	NM	1u/10
C468	NM	NM	1u/10
C464	NM	NM	DCH1246

*2

	IC681
A, C, D	PEB096A8
B	PEB102A8

NOTE :

- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

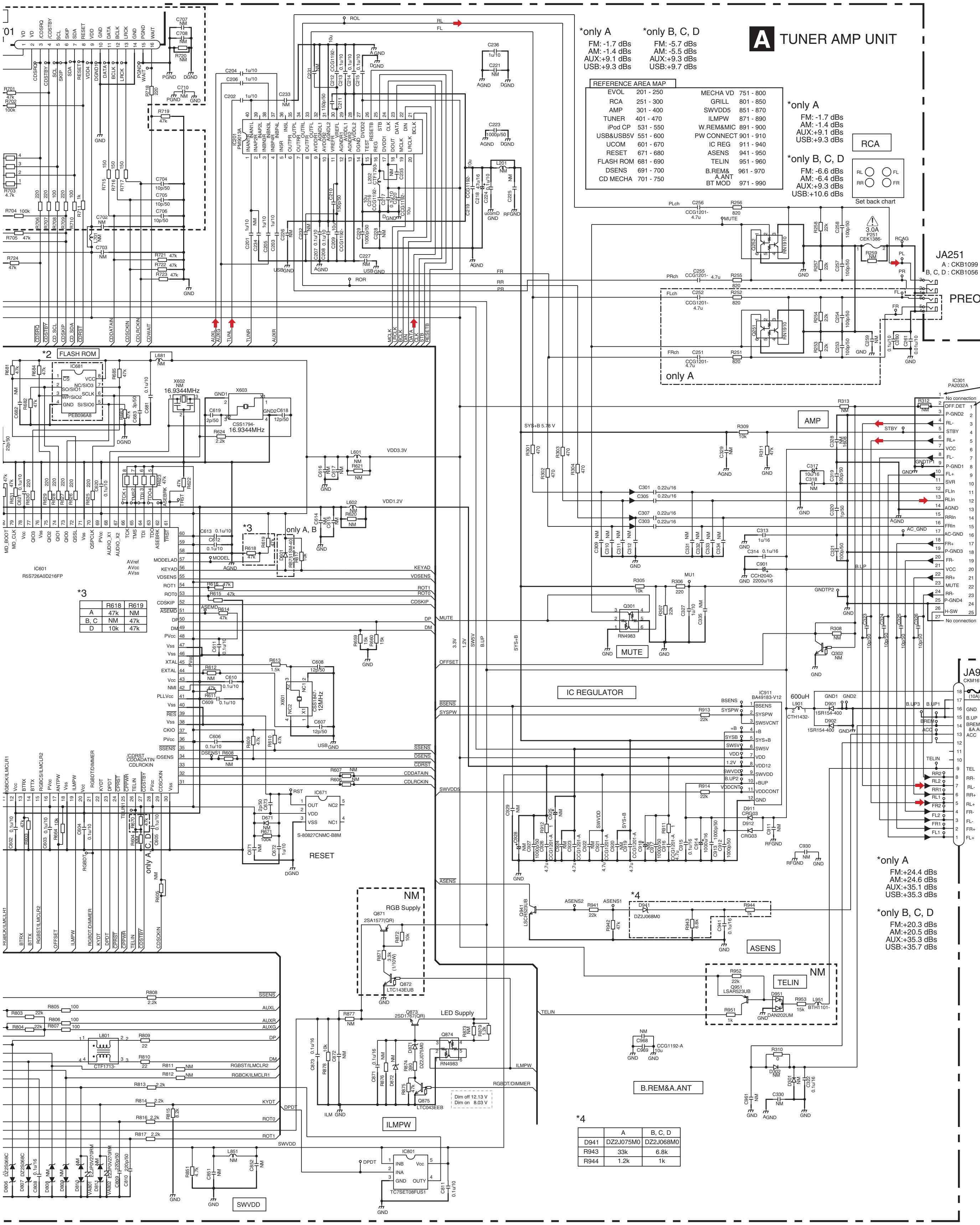
A	MVH-X360BT/XINEW5
B	MVH-X360BT/XINUC
C	MVH-X365BT/XINCS
D	MVH-X365BT/XINGS

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

NM : No Mount

A

A-b



REFERENCE AREA MAP

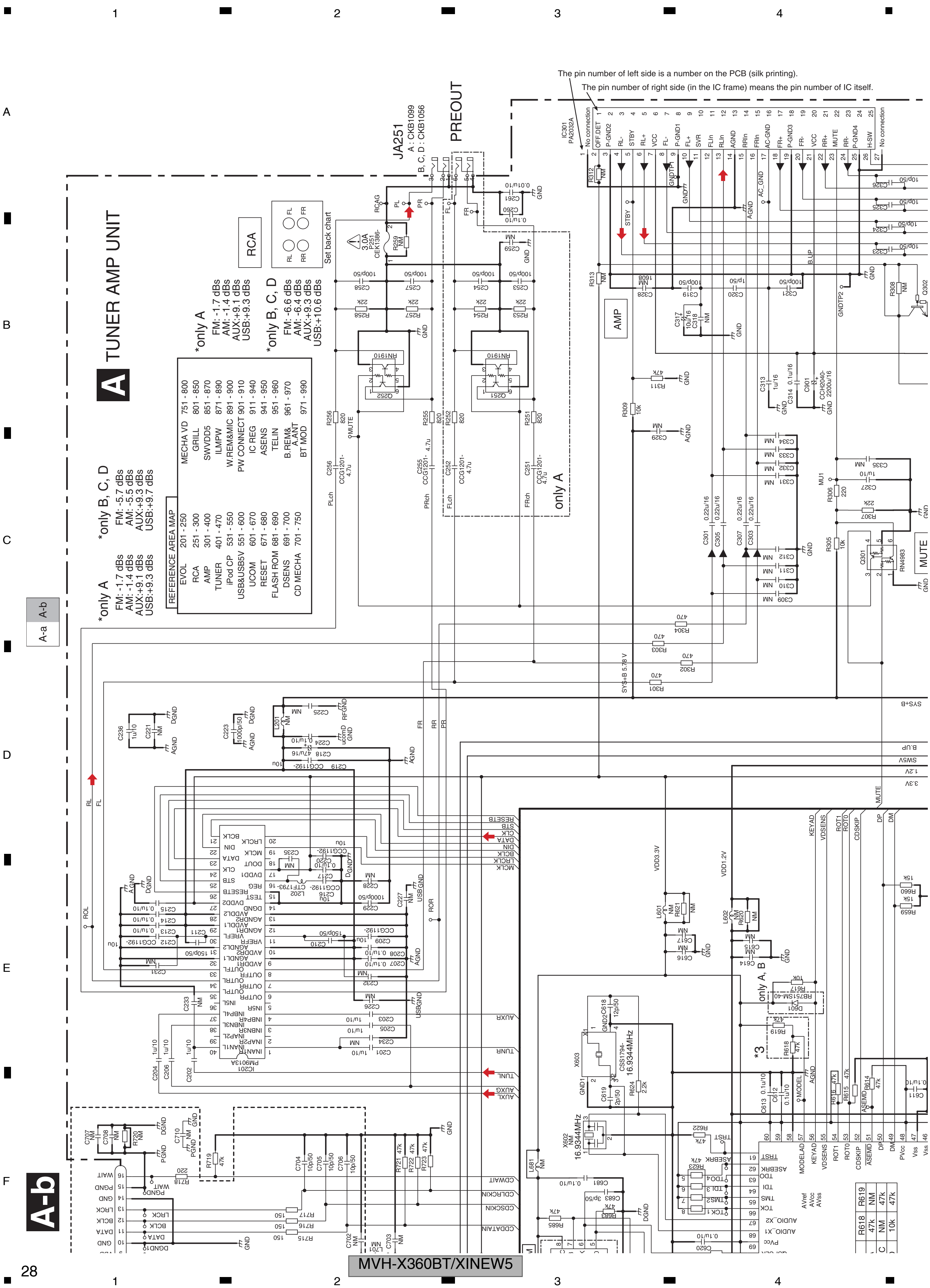
EVOL	201 - 250	MECHA VD	751 - 800
RCA	251 - 300	GRILL	801 - 850
AMP	301 - 400	SWVDD5	851 - 870
TUNER	401 - 470	ILMPW	871 - 890
iPod CP	531 - 550	W.REM&MIC	891 - 900
USB&USB5V	551 - 600	PW CONNECT	901 - 910
UCOM	601 - 670	IC REG	911 - 940
RESET	671 - 680	ASENS	941 - 950
FLASH ROM	681 - 690	TELIN	951 - 960
DSENS	691 - 700	B.REM& A.ANT	961 - 970
CD MECHA	701 - 750	BT MOD	971 - 990

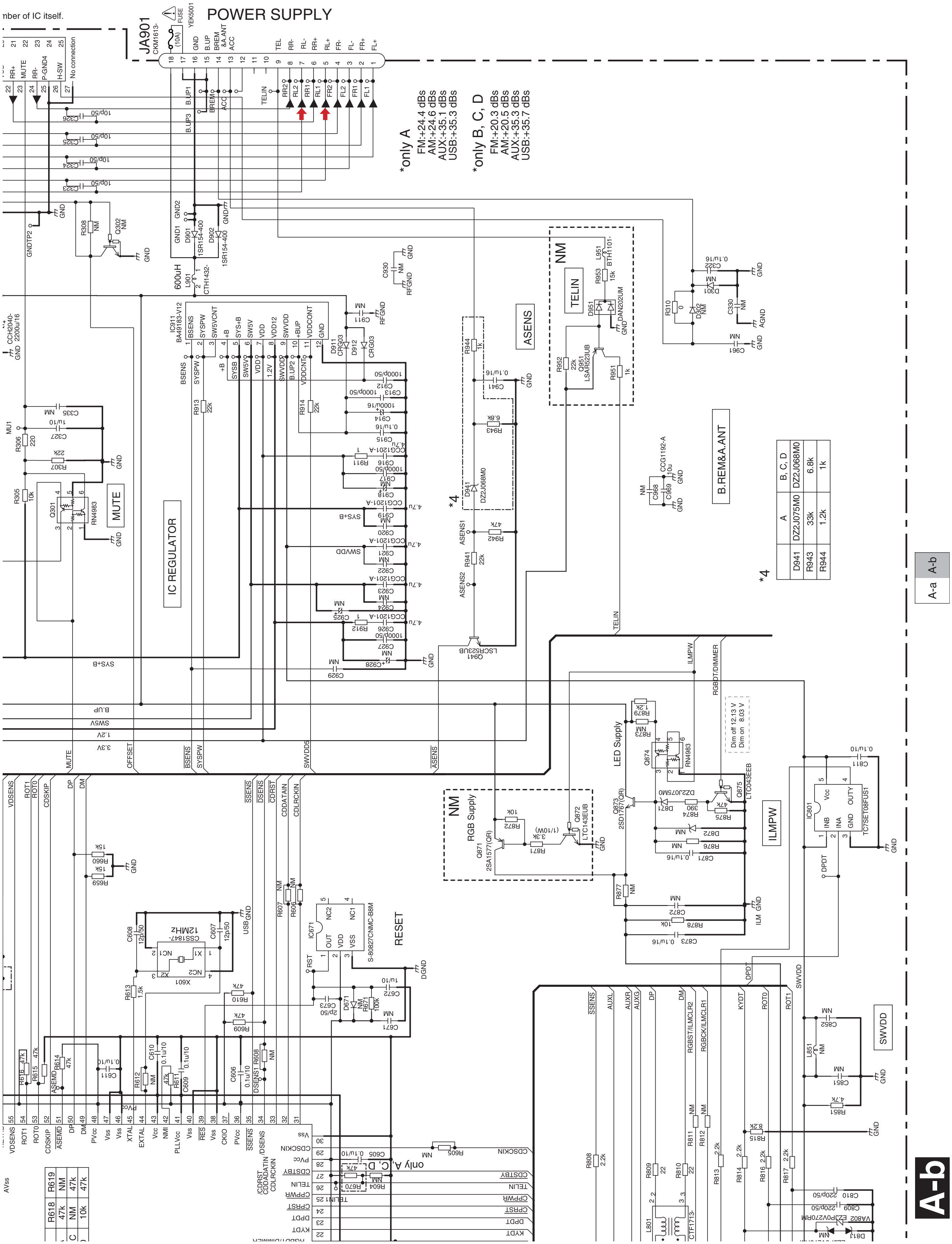
*3

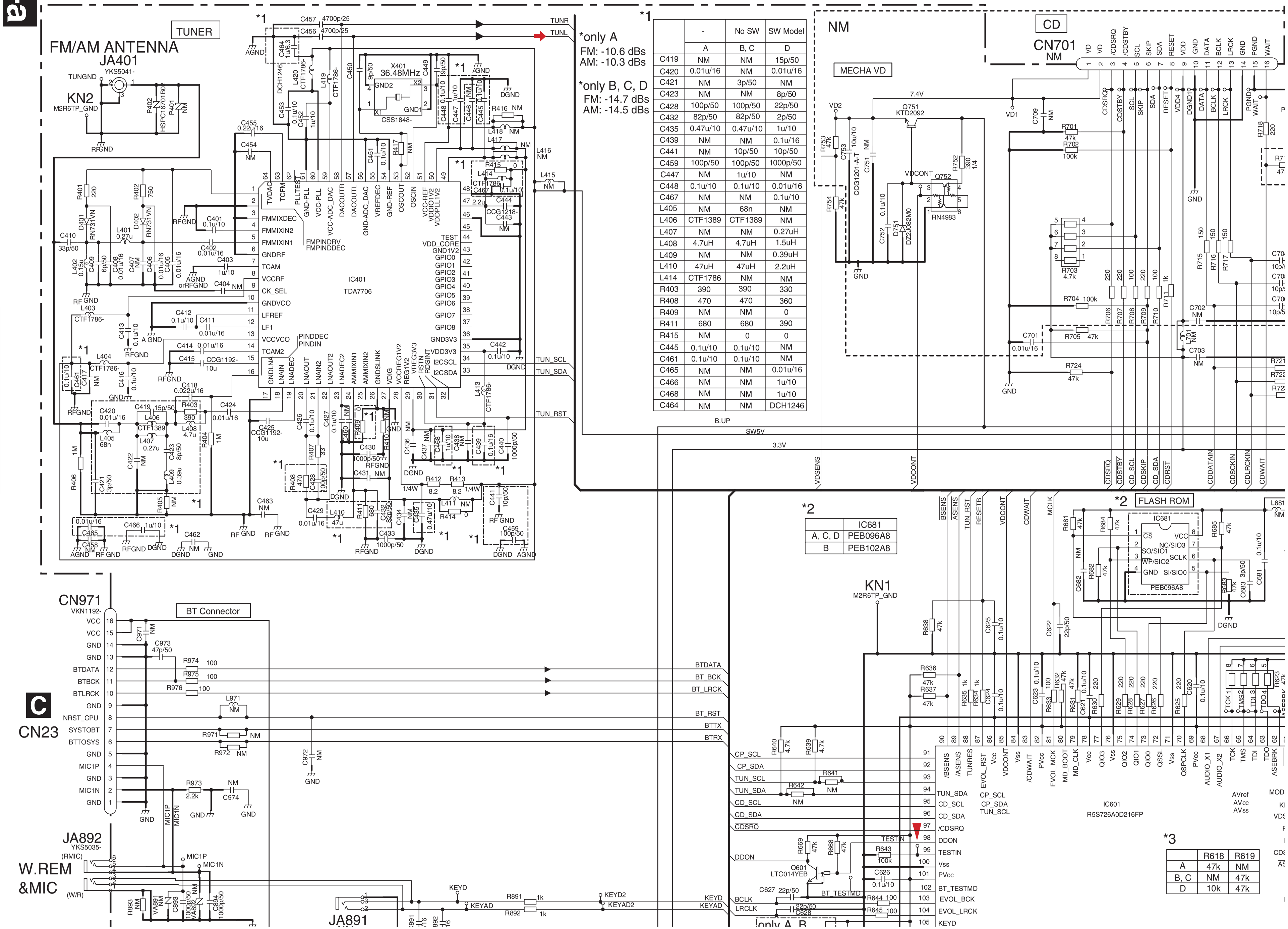
	R618	R619
A	47k	NM
B, C	NM	47k
D	10k	47k

*4

	A	B, C, D
D941	DZ2J075M0	DZ2J068M0
R943	33k	6.8k
R944	1.2k	1k


A TUNER AMP UNIT
A-b
A-a A-b
PREOUT
JA251
A : CKB1099
B, C, D : CKB1056
RCA
Set back chart
*only A
FM: -1.7 dBs
AM: -1.4 dBs
AUX:+9.1 dBs
USB:+9.3 dBs
*only B, C, D
FM: -5.7 dBs
AM: -5.5 dBs
AUX:+9.3 dBs
USB:+9.7 dBs
*only B, C, D
FM: -6.6 dBs
AM: -6.4 dBs
AUX:+9.3 dBs
USB:+10.6 dBs
REFERENCE AREA MAP
EVOL 201 - 250
RCA 251 - 300
AMP 301 - 400
TUNER 401 - 470
iPod CP 531 - 550
USB&USB5V 551 - 600
UCOM 601 - 670
RESET 671 - 680
FLASH ROM 681 - 690
DSENS 691 - 700
CD MECHA 701 - 750
MECHA VD 751 - 800
GRILL 801 - 850
SWVDD5 851 - 870
ILMPW 871 - 890
W.REM&MIC 891 - 900
PW CONNECT 901 - 910
IC REG 911 - 940
ASENS 941 - 950
TELIN 951 - 960
B.REM&A.ANT 961 - 970
BT MOD 971 - 990
The pin number of left side is a number on the PCB (silk printing).
The pin number of right side (in the IC frame) means the pin number of IC itself.
IC301 PA2032A
AMP
MUTE
only A
only A, B
IC201 PM9013A


POWER SUPPLY
JA901
IC REGULATOR
MUTE
ASENS
TELIN
NM
B.REM&A.ANT
RGB Supply
LED Supply
ILMPW
RESET
SWVDD
*only A
FM:+24.4 dBs
AM:+24.6 dBs
AUX:+35.1 dBs
USB:+35.3 dBs
*only B, C, D
FM:+20.3 dBs
AM:+20.5 dBs
AUX:+35.3 dBs
USB:+35.7 dBs
A-a
A-b



*1

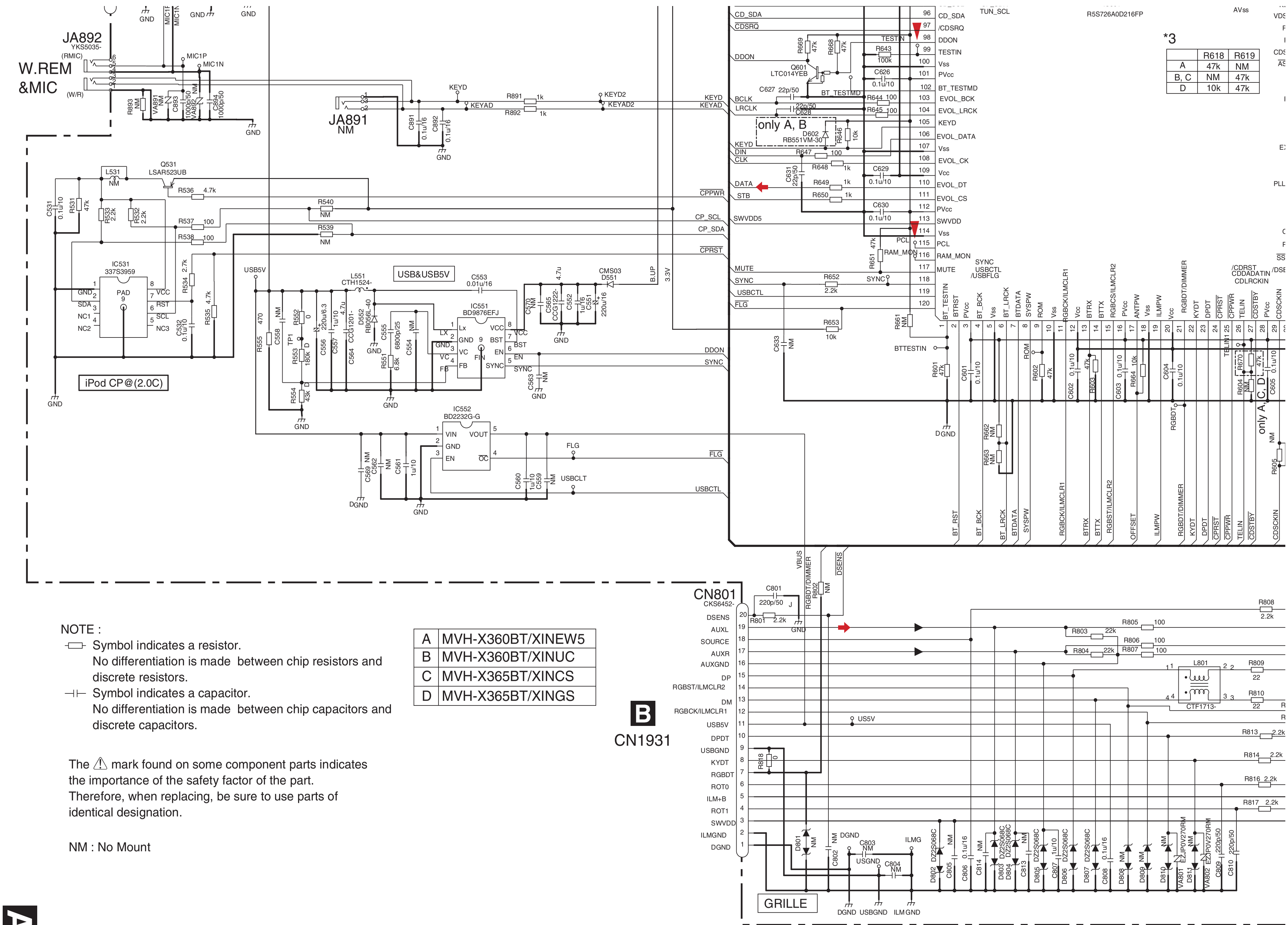
	-	No SW	SW Model
	A	B, C	D
C419	NM	NM	15p/50
C420	0.01u/16	NM	0.01u/16
C421	NM	3p/50	NM
C423	NM	NM	8p/50
C428	100p/50	100p/50	22p/50
C432	82p/50	82p/50	2p/50
C435	0.47u/10	0.47u/10	1u/10
C439	NM	NM	0.1u/16
C441	NM	10p/50	10p/50
C459	100p/50	100p/50	1000p/50
C447	NM	1u/10	NM
C448	0.1u/10	0.1u/10	0.01u/16
C467	NM	NM	0.1u/10
L405	NM	68n	NM
L406	CTF1389	CTF1389	NM
L407	NM	NM	0.27uH
L408	4.7uH	4.7uH	1.5uH
L409	NM	NM	0.39uH
L410	47uH	47uH	2.2uH
L414	CTF1786	NM	NM
R403	390	390	330
R408	470	470	360
R409	NM	NM	0
R411	680	680	390
R415	NM	0	0
C445	0.1u/10	0.1u/10	NM
C461	0.1u/10	0.1u/10	NM
C465	NM	NM	0.01u/16
C466	NM	NM	1u/10
C468	NM	NM	1u/10
C464	NM	NM	DCH1246

*2

	IC681
A, C, D	PEB096A8
B	PEB102A8

*3

	R618	R619
A	47k	NM
B, C	NM	47k
D	10k	47k



*3

	R618	R619
A	47k	NM
B, C	NM	47k
D	10k	47k

NOTE :

- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

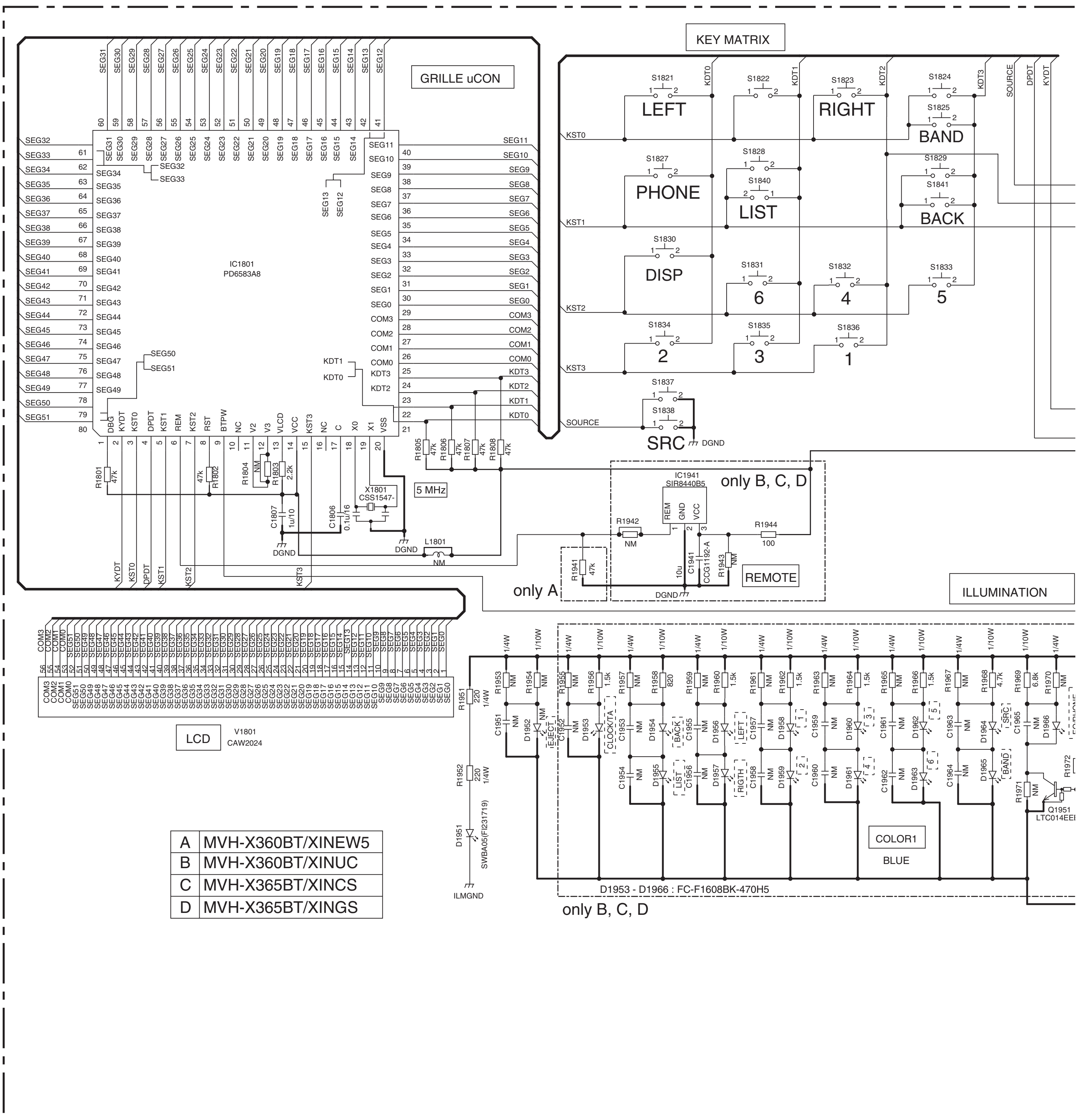
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

NM : No Mount

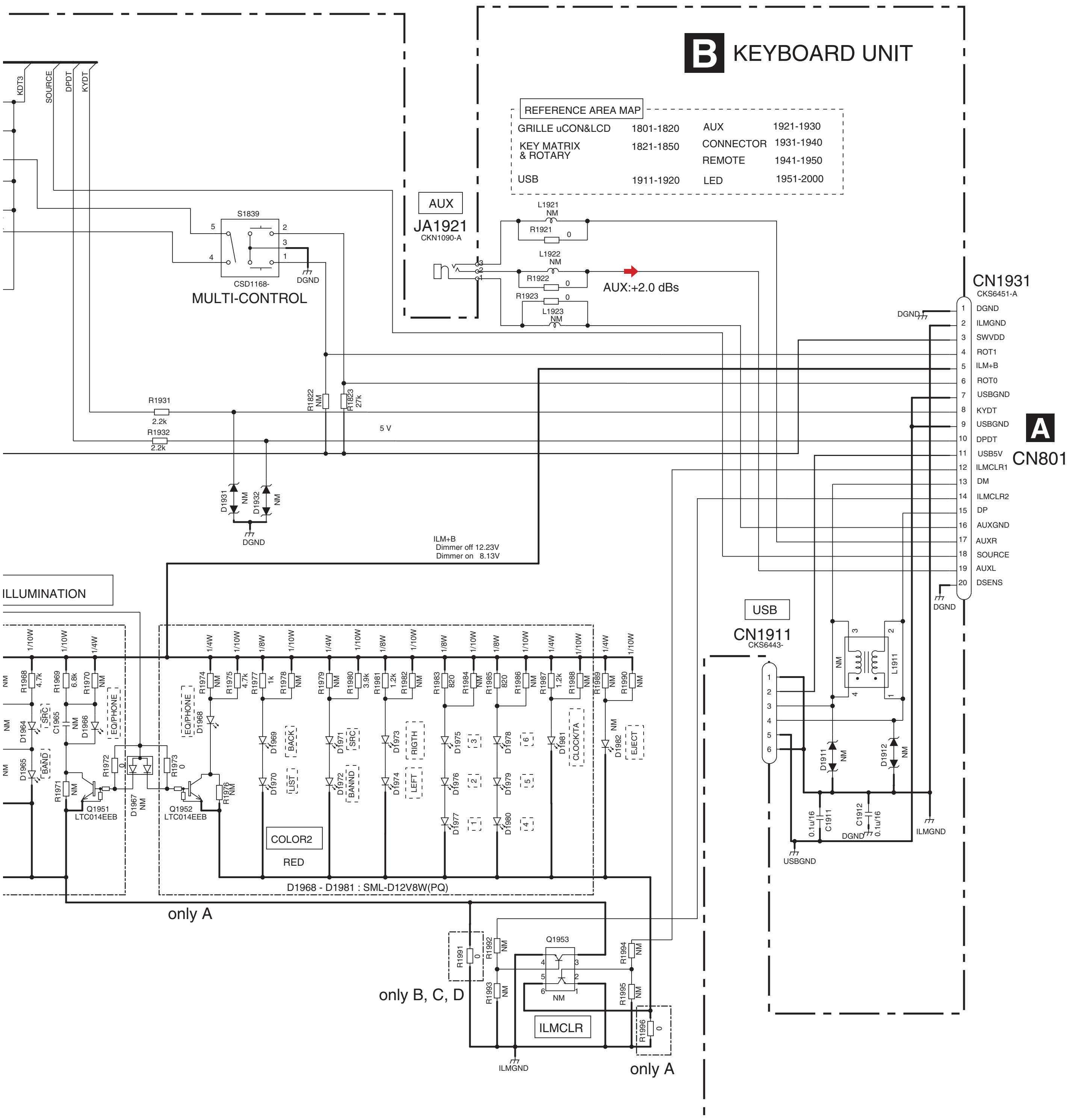
A	MVH-X360BT/XINEW5
B	MVH-X360BT/XINUC
C	MVH-X365BT/XINCS
D	MVH-X365BT/XINGS

A-a | A-b

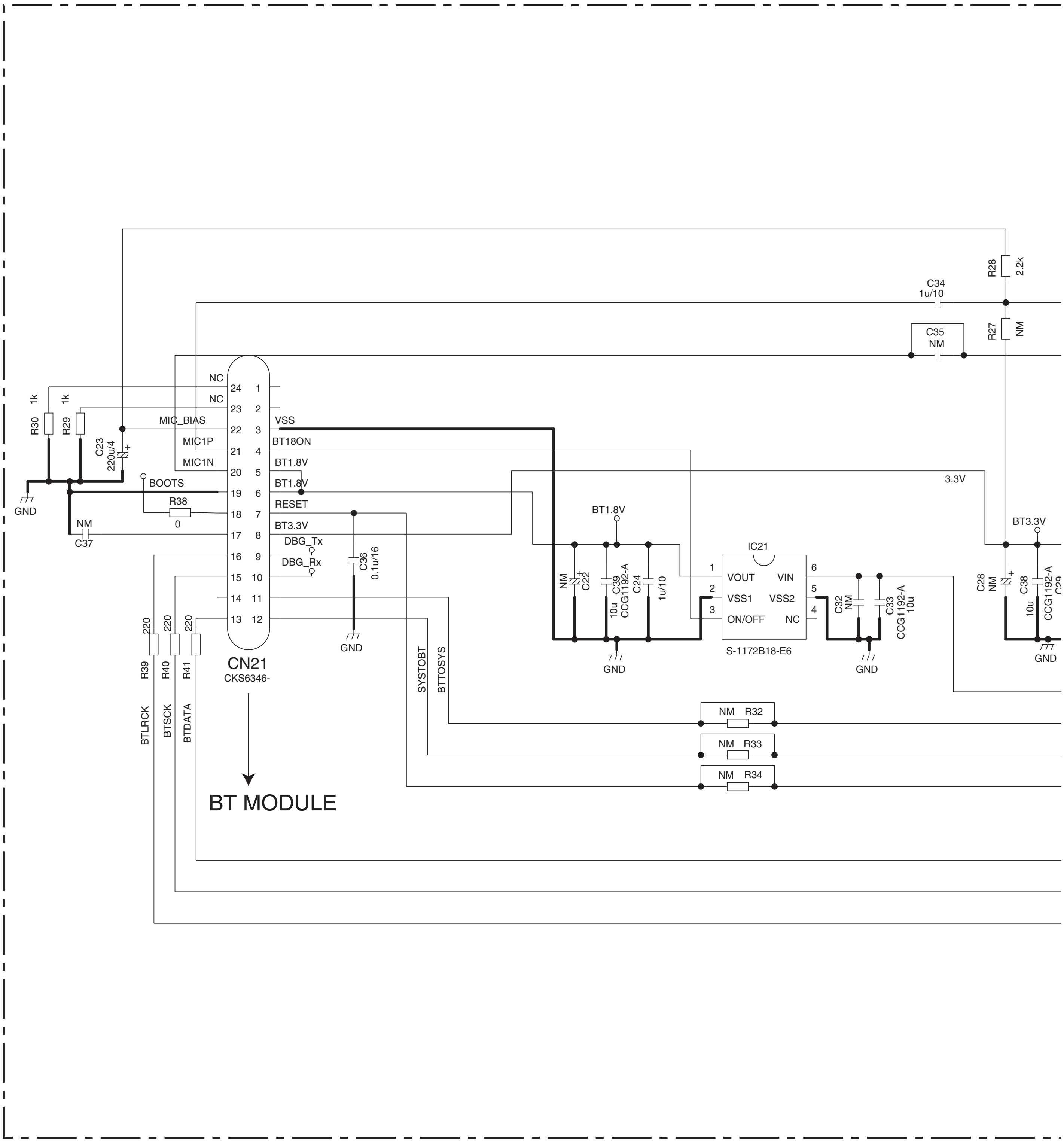
10.2 KEYBOARD UNIT

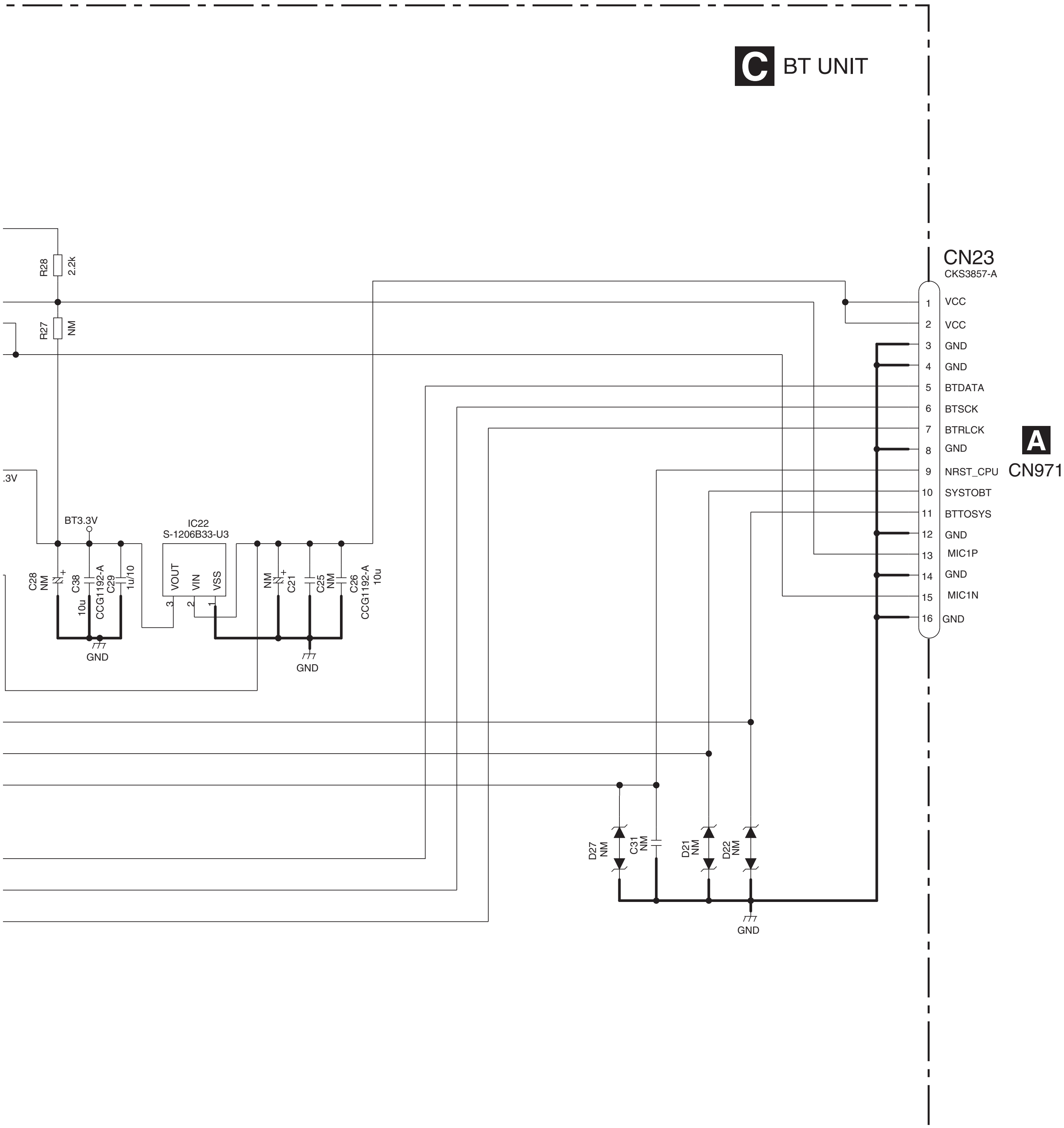


A	MVH-X360BT/XINEW5
B	MVH-X360BT/XINUC
C	MVH-X365BT/XINCS
D	MVH-X365BT/XINGS


B KEYBOARD UNIT
REFERENCE AREA MAP
GRILLE uCON&LCD 1801-1820
KEY MATRIX & ROTARY 1821-1850
USB 1911-1920
AUX 1921-1930
CONNECTOR 1931-1940
REMOTE 1941-1950
LED 1951-2000
AUX
JA1921
CKN1090-A
L1921 NM
R1921 0
L1922 NM
R1922 0
R1923 0
L1923 NM
AUX:+2.0 dBs
S1839
CSD1168-
MULTI-CONTROL
DGND
KDT3
SOURCE
DPDT
KYDT
R1931 2.2k
R1932 2.2k
R1822 NM
R1823 27k
5 V
D1931 NM
D1932 NM
DGND
ILM+B
Dimmer off 12.23V
Dimmer on 8.13V
CN1931
CKS6451-A
1 DGND
2 ILMGND
3 SWVDD
4 ROT1
5 ILM+B
6 ROT0
7 USBGND
8 KYDT
9 USBGND
10 DPDT
11 USB5V
12 ILMCLR1
13 DM
14 ILMCLR2
15 DP
16 AUXGND
17 AUXR
18 SOURCE
19 AUXL
20 DSENS
A
CN801
DGND
USB
CN1911
CKS6443-
L1911
NM
D1911 NM
D1912 NM
C1911 0.1u/16
C1912 0.1u/16
DGND
USBGND
ILMGND
ILLUMINATION
R1968 4.7k
R1969 6.8k
R1970 NM
D1964
SRC
C1965 NM
D1966
EQ/PHONE
D1965
BAND
R1971 NM
Q1951 LTC014EEB
R1972
D1967 NM
R1973 0
Q1952 LTC014EEB
EQ/PHONE
D1968
R1974 NM
R1975 4.7k
R1976 NM
R1977 1k
R1978 NM
R1979 NM
R1980 3.9k
R1981 1.2k
R1982 NM
R1983 820
R1984 NM
R1985 820
R1986 NM
R1987 1.2k
R1988 NM
R1989 NM
R1990 NM
D1969 BACK
D1970 LIST
D1971 SRC
D1972 BANND
D1973 RIGTH
D1974 LEFT
D1975 3
D1976 2
D1977 1
D1978 6
D1979 5
D1980 4
D1981 CLOCK/TA
D1982 EJECT
COLOR2
RED
D1968 - D1981 : SML-D12V8W(PQ)
only A
R1991 0
R1992 NM
R1993 NM
Q1953
NM
R1994 NM
R1995 NM
R1996 0
ILMCLR
ILMGND
only B, C, D
only A

10.3 BT UNIT

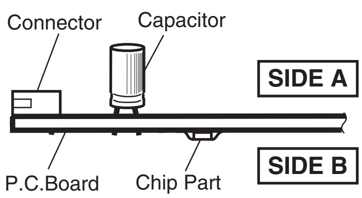

NC
NC
MIC_BIAS
MIC1P
MIC1N
BOOTS
R38
0
NM
C37
R30 1k
R29 1k
C23 220u/4
GND
VSS
BT18ON
BT1.8V
BT1.8V
RESET
BT3.3V
DBG_Tx
DBG_Rx
CN21
CKS6346-
C36 0.1u/16
GND
R39 220
R40 220
R41 220
BTLRCK
BTSCK
BTDATA
BT MODULE
SYSTOBT
BTTOSYS
BT1.8V
NM C22
C39 10u CCG1192-A
C24 1u/10
GND
IC21
VOUT
VSS1
ON/OFF
VIN
VSS2
NC
S-1172B18-E6
C32 NM
C33 10u CCG1192-A
GND
NM R32
NM R33
NM R34
C34 1u/10
C35 NM
R28 2.2k
R27 NM
3.3V
BT3.3V
C28 NM
C38 10u CCG1192-A
GND


C BT UNIT
CN23
CKS3857-A
1 VCC
2 VCC
3 GND
4 GND
5 BTDATA
6 BTSCK
7 BTRLCK
8 GND
9 NRST_CPU
10 SYSTOBT
11 BTTOSYS
12 GND
13 MIC1P
14 GND
15 MIC1N
16 GND
A CN971
R28 2.2k
R27 NM
.3V
BT3.3V
IC22
S-1206B33-U3
VOUT
VIN
VSS
C28 NM
C38 10u CCG1192-A
C29 1u/10
NM C21
C25 NM
C26 CCG1192-A 10u
GND
D27 NM
C31 NM
D21 NM
D22 NM

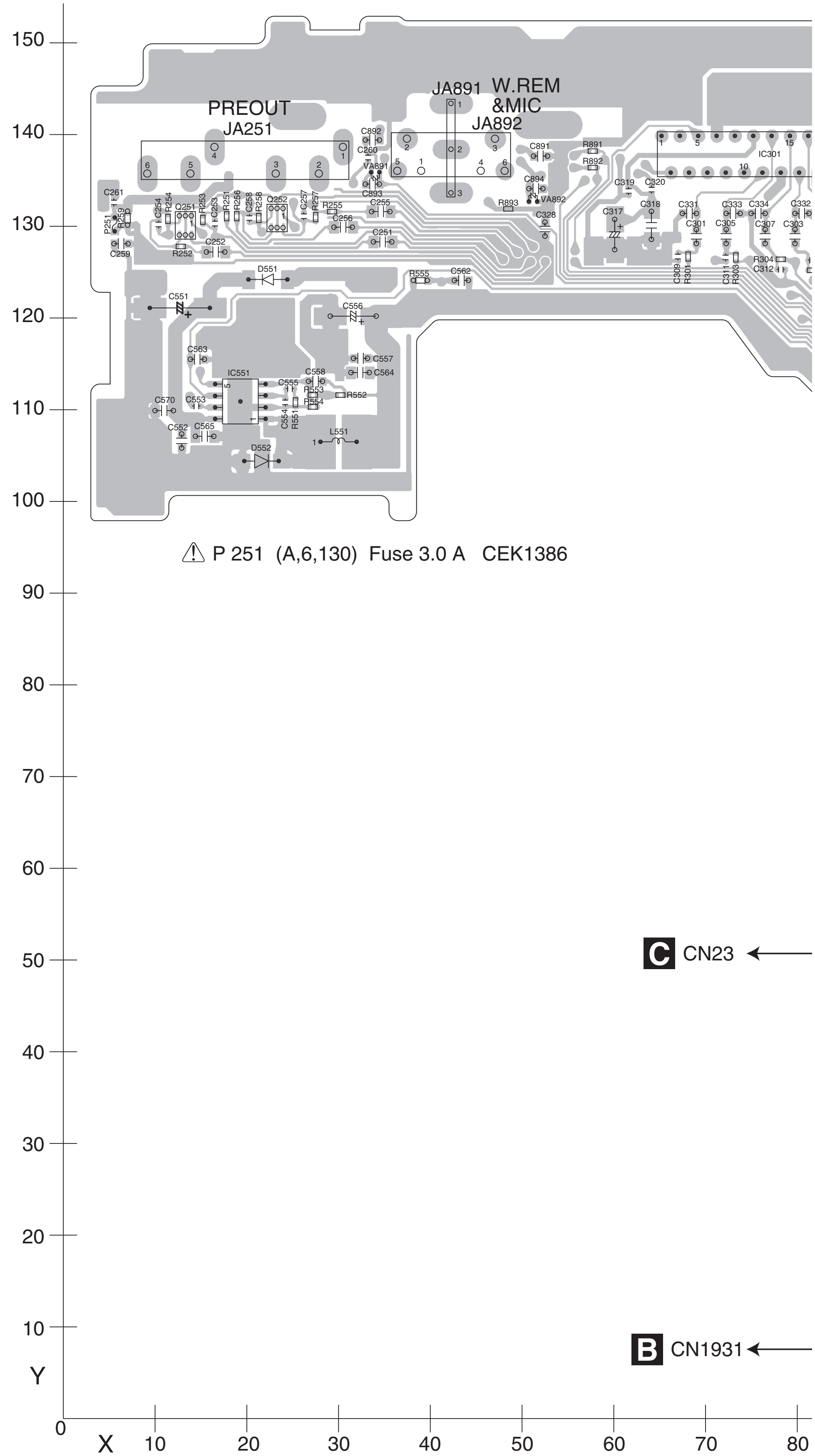
11. PCB CONNECTION DIAGRAM
11.1 TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams



A TUNER AMP UNIT

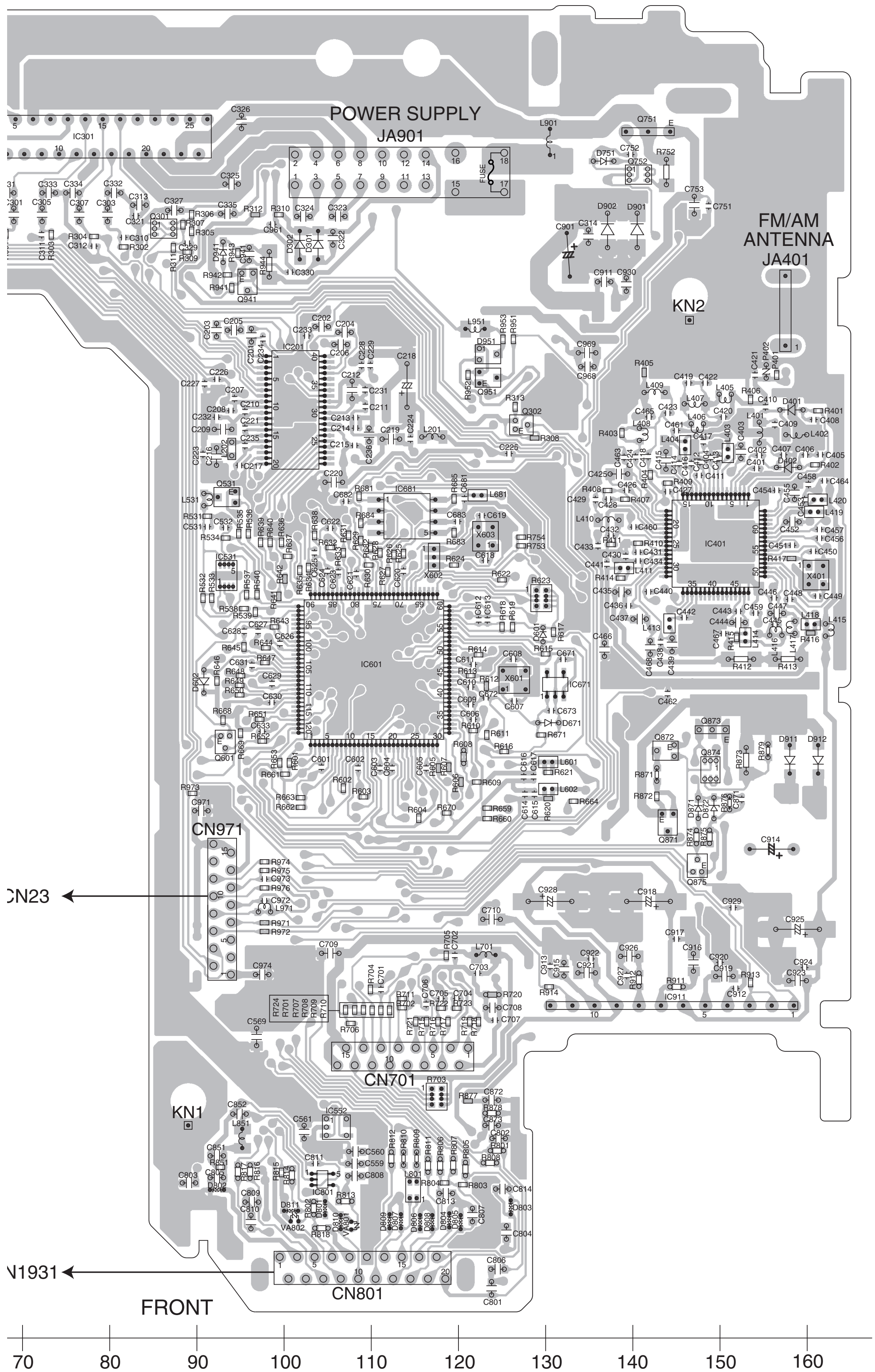


⚠ P 251 (A,6,130) Fuse 3.0 A CEK1386

A

A

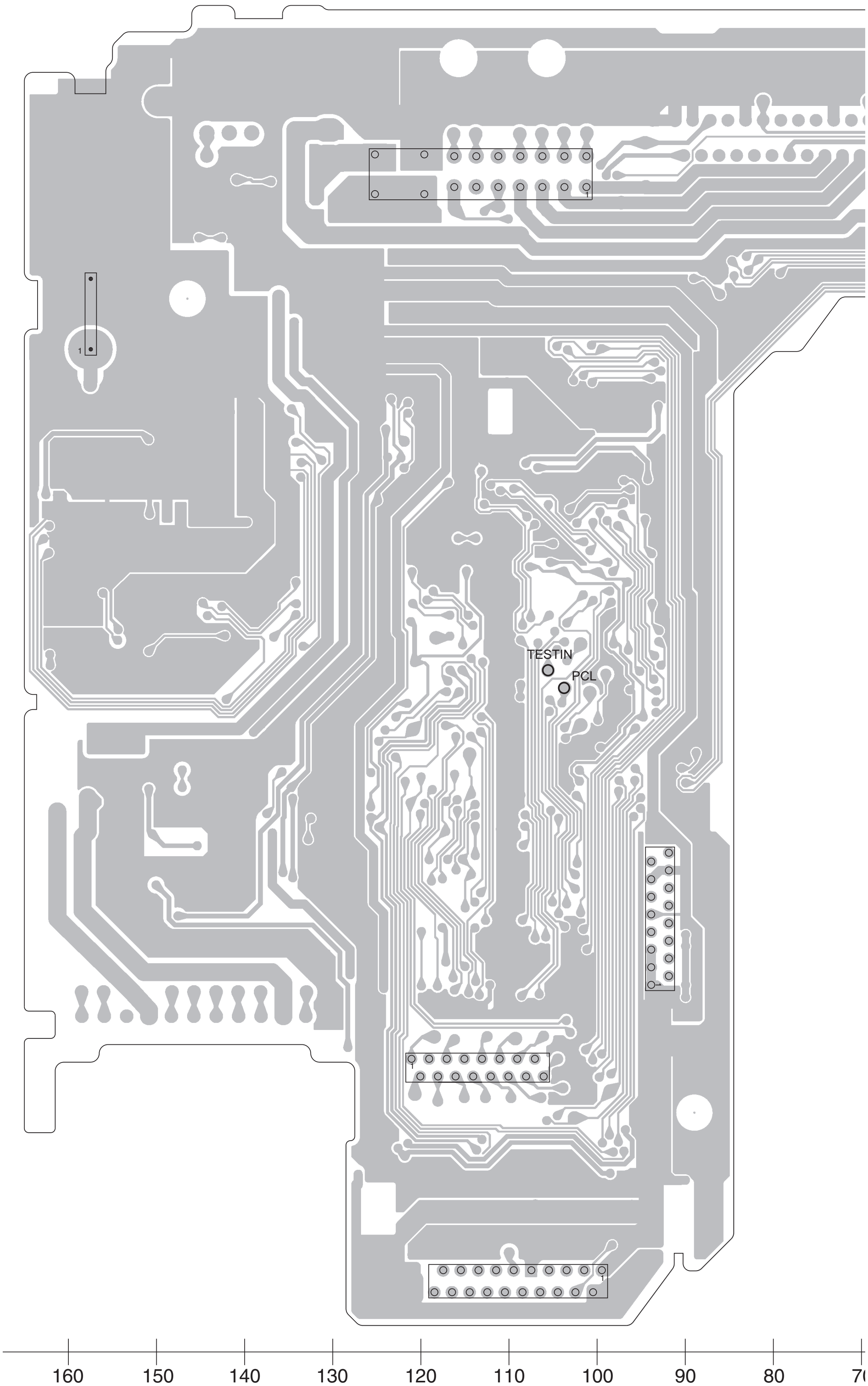
SIDE A



B
C
D
E
F

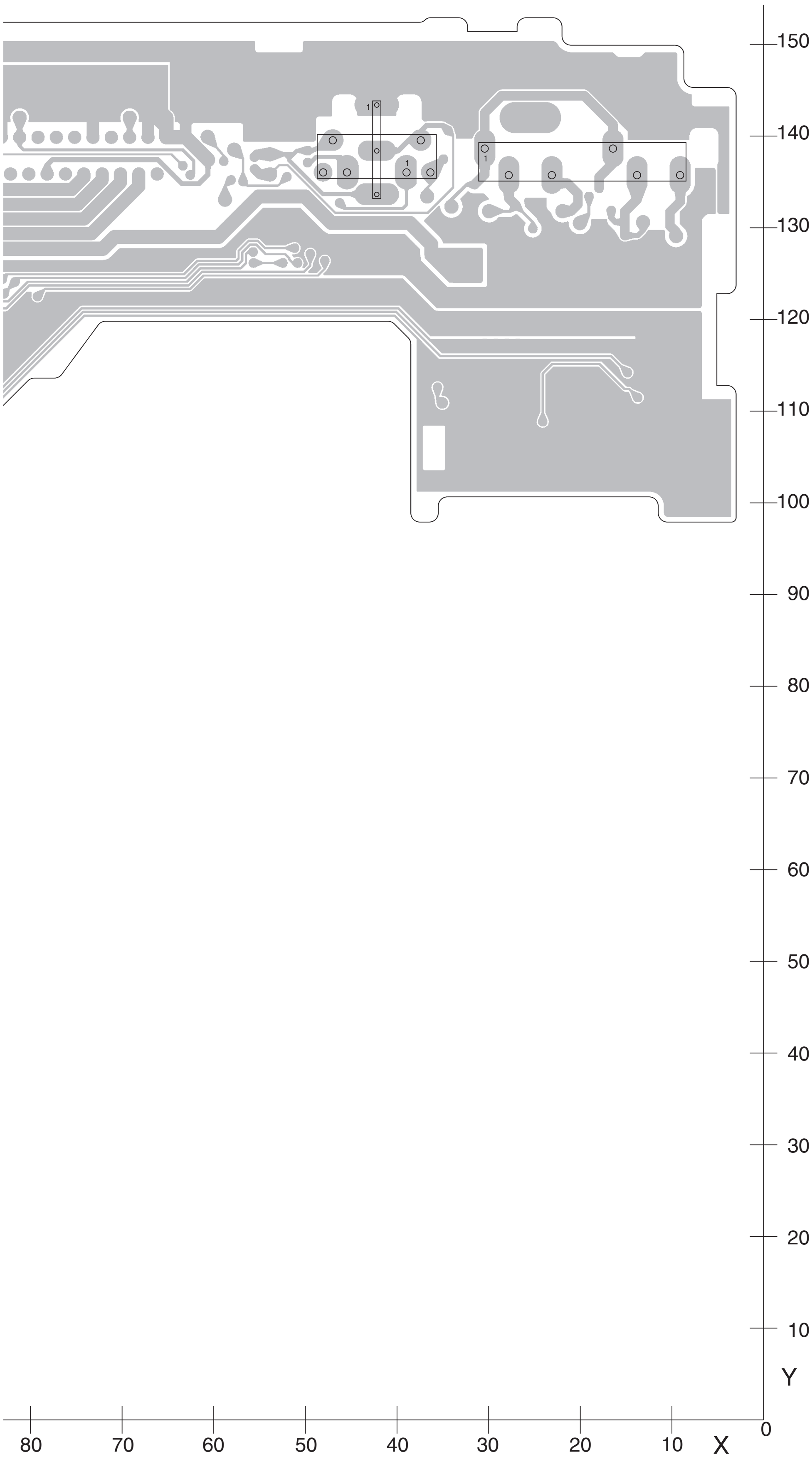
A

A TUNER AMP UNIT



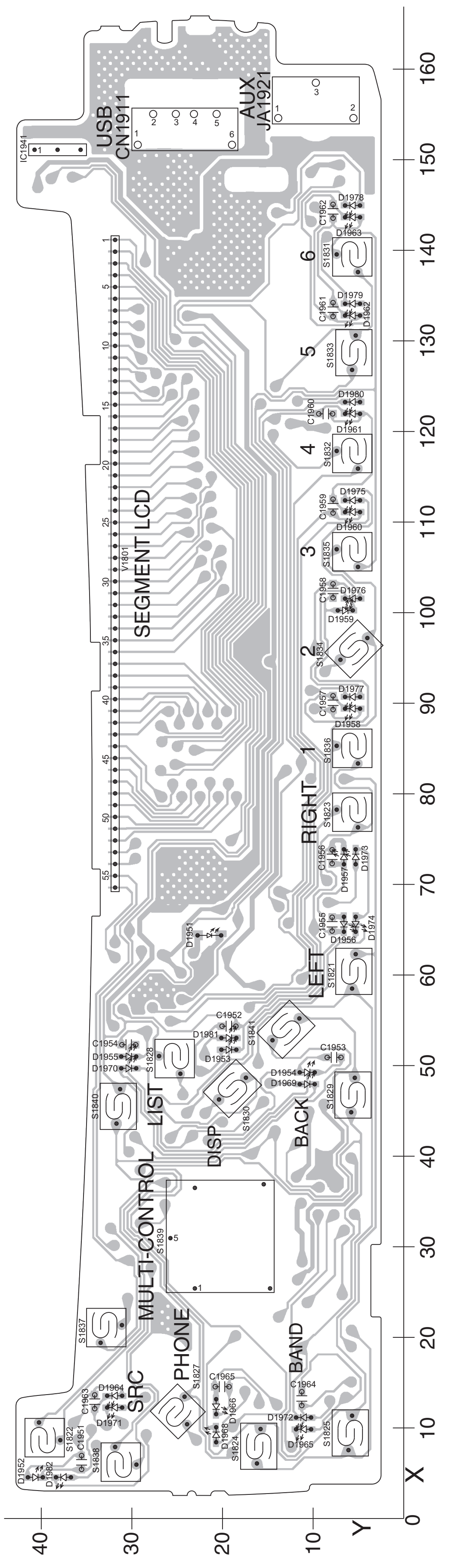
A

SIDE B

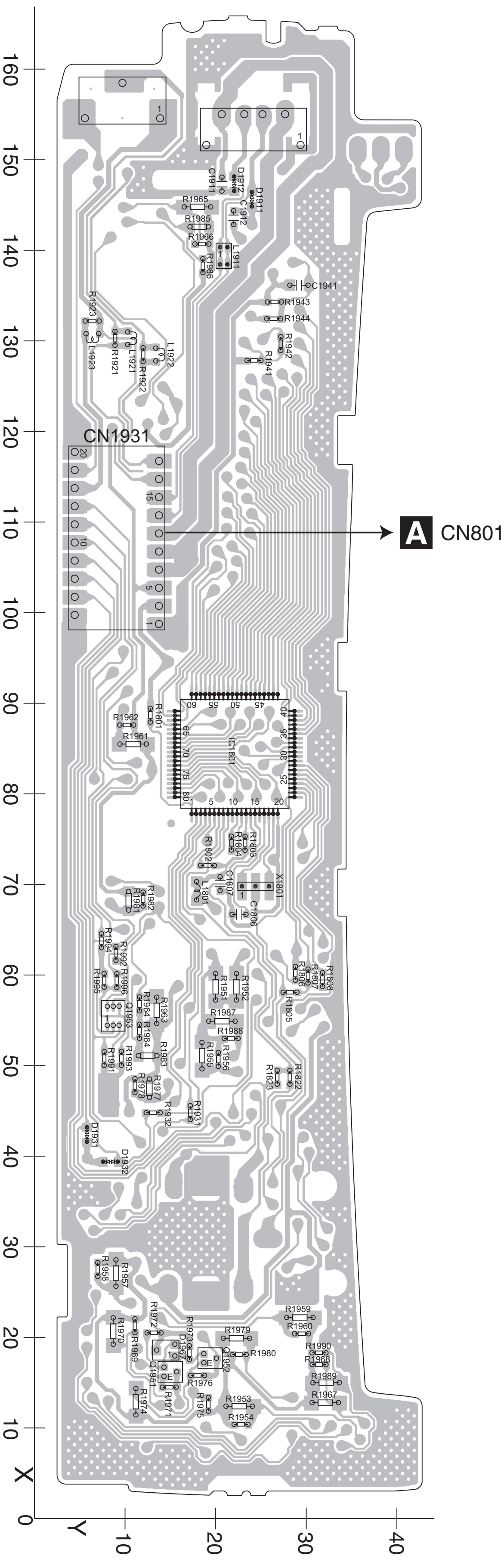


11.2 KEYBOARD UNIT

B KEYBOARD UNIT SIDE A



B KEYBOARD UNIT SIDE B

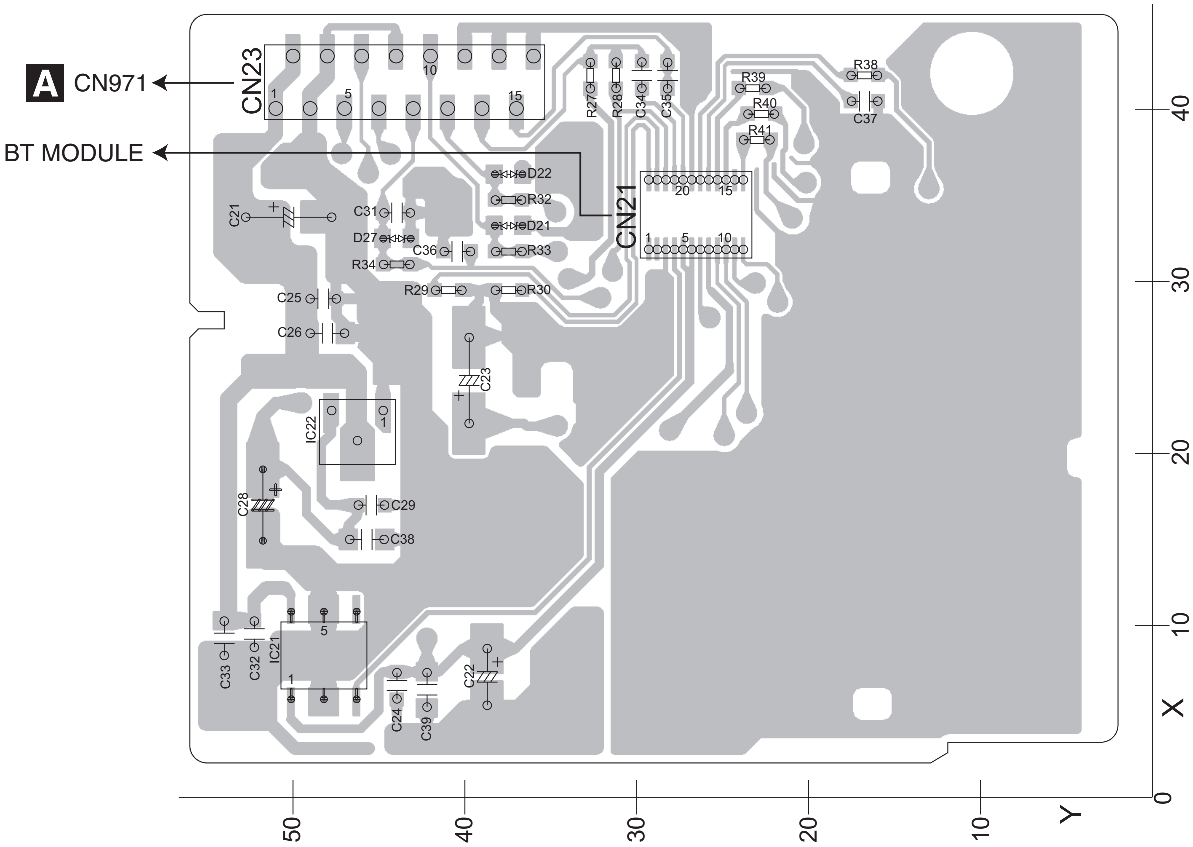


B

11.3 BT UNIT

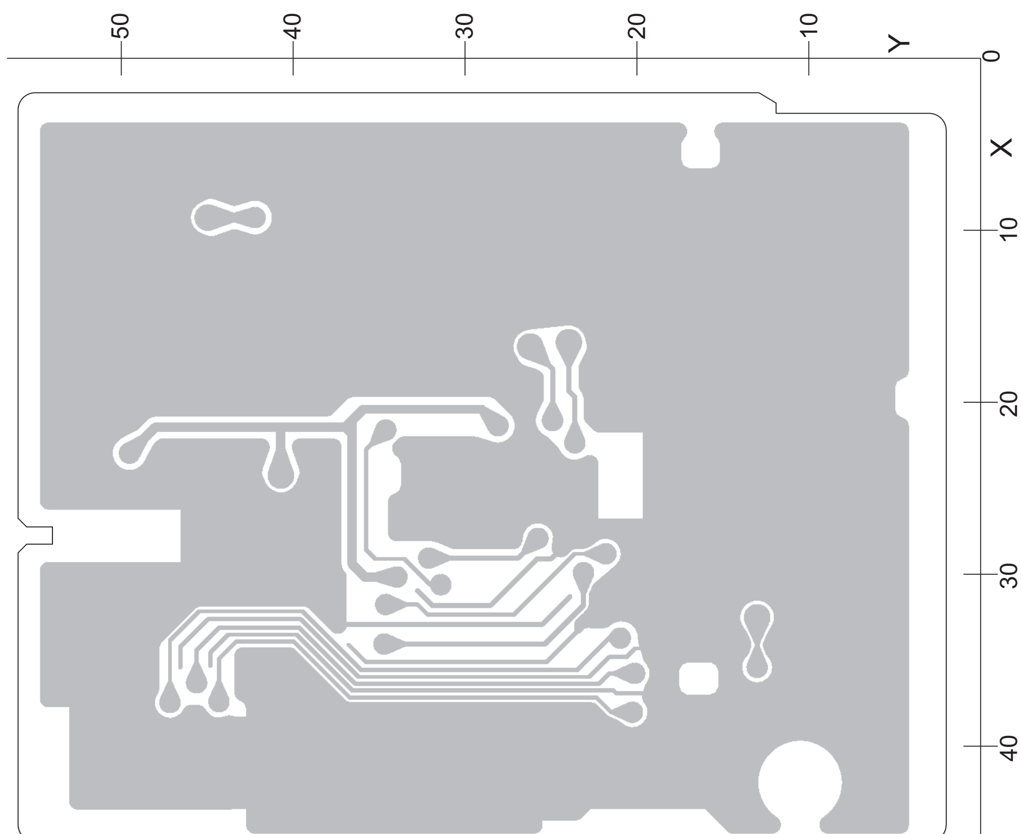
C BT UNIT

SIDE A



C BT UNIT

SIDE B



A B C D E F

C

12. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

  Chip Resistor

  RS1/○S○○○J,RS1/○○S○○○J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*

  Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

  IC 301 (A, 91, 111) IC NJM2068V
- *The expression of the unit in this manual is shown by u instead of μ. Please do not make a mistake.*

Circuit Symbol and No. **Part No.**

A:MVH-X360BT/XINEW5

B:MVH-X360BT/XINUC

C:MVH-X365BT/XINCS

D:MVH-X365BT/XINGS

Unit Number : QWM3665(A)

Unit Number : QWM3664(B)

Unit Number : QWM3666(C)

Unit Number : QWM3667(D)

Unit Name : Tuner Amp Unit

Unit Number : (A)

Unit Number : (B,C,D)

Unit Name : Keyboard Unit

Unit Number : QWM3750

Unit Name : BT Unit

A

Unit Number : QWM3665(A)
Unit Number : QWM3664(B)
Unit Number : QWM3666(C)
Unit Number : QWM3667(D)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

Circuit Symbol and No.			Part No.
IC 201	(A,101,107)	LSI	PM9013A
IC 301	(A,78,142)	IC	PA2032A
IC 401	(A,150,91)	IC	TDA7706
IC 531	(A,93,88)	IC	337S3959
IC 551	(A,19,111)	Regulator IC	BD9876EFJ
IC 552	(A,106,24)	IC	BD2232G-G
IC 601	(A,110,77)	IC	R5S726A0D216FP
IC 671	(A,131,75)	IC	S-80827CNMC-B8M
IC 681	(A,114,94)	Flash ROM Unit(A,C,D)	PEB096A8
	(A,114,94)	Flash ROM Unit(B)	PEB102A8
IC 801	(A,104,18)	L-MOS And Gate	TC7SET08FUS1
IC 911	(A,145,28)	IC	BA49183-V12
Q 251	(A,13,130)	Chip Transistor(A)	RN1910
Q 252	(A,23,131)	Chip Transistor	RN1910
Q 301	(A,86,127)	Chip Transistor	RN4983
Q 531	(A,93,97)	Transistor	LSAR523UB
Q 601	(A,93,68)	Transistor	LTC014YEB
Q 873	(A,149,72)	Transistor	2SD1767
Q 874	(A,149,65)	Chip Transistor	RN4983
Q 875	(A,147,54)	Transistor	LTC043EEB
Q 941	(A,96,121)	Transistor	LSCR523UB
D 401	(A,158,107)	Diode	RN731VN
D 402	(A,158,100)	Diode	RN731VN
D 551	(A,22,124)	Diode	CMS03
D 552	(A,22,104)	Diode	RB056L-40
D 601	(A,130,81)	Diode(A,B)	RB751SM-40
D 602	(A,91,75)	Diode(A,B)	RB551VM-30
D 802	(A,92,17)	Diode	DZ2S068C
D 803	(A,126,15)	Diode	DZ2S068C
D 804	(A,119,14)	Diode	DZ2S068C
D 805	(A,120,13)	Diode	DZ2S068C
D 806	(A,116,13)	Diode	DZ2S068C
D 807	(A,113,13)	Diode	DZ2S068C
D 871	(A,148,61)	Diode	DZ2J075M0
D 901	(A,141,127)	Diode	1SR154-400
D 902	(A,137,127)	Diode	1SR154-400
D 911	(A,158,66)	Diode	CRG03
D 912	(A,161,66)	Diode	CRG03
D 941	(A,93,125)	Diode(A)	DZ2J075M0
	(A,93,125)	Diode(B,C,D)	DZ2J068M0
L 202	(A,94,102)	Inductor	CTF1793
L 401	(A,155,104)	Chip Coil	LCTAWR27J2520
L 402	(A,159,104)	Chip Coil	LCTAWR15J2520
L 403	(A,151,102)	Inductor	CTF1786
L 404	(A,146,102)	Inductor	CTF1786
L 405	(A,151,108)	Inductor(B,C)	LCYB68NJ1608
L 406	(A,147,105)	Inductor(A,B,C)	CTF1389
L 407	(A,147,107)	Chip Coil(D)	LCTAWR27J2520

Circuit Symbol and No.		Part No.
L 408	(A,141,104) Inductor(A,B,C)	LCTC4R7K1608
	(A,141,104) Inductor(D)	LCTC1R5K1608
L 409	(A,143,109) Chip Coil(D)	LCTAWR39J2520
L 410	(A,137,94) Chip Coil(A,B,C)	LCTAW470J2520
	(A,137,94) Inductor(D)	LCTAW2R2J2520
L 413	(A,144,82) Inductor	CTF1786
L 414	(A,153,80) Inductor(A)	CTF1786
L 419	(A,161,95) Inductor	CTF1786
L 420	(A,161,96) Inductor	CTF1786
L 551	(A,30,107) Inductor	CTH1524
L 801	(A,115,17) Inductor	CTF1713
L 901	(A,112,141) Choke Coil 600 uH	CTH1432
X 401	(A,161,88) Crystal Resonator 36.48 MHz	CSS1848
X 601	(A,126,76) Crystal Resonator 12 MHz	CSS1847
X 603	(A,123,92) Resonator 16.93 MHz	CSS1794
⚠ P251	(A,6,130) Fuse 3.0 A	CEK1386
P 402	(A,155,111) Surge Absorber	HSPC16701B02
VA801	(A,108,13) SMD Varistor	MLV0402ES012V0010N
VA802	(A,101,13) SMD Varistor	MLV0402ES012V0010N
CN801	(A,109,4) Connector	CKS6452
CN971	(A,93,49) Connector	VKN1192
JA251	(A,19,138) Pin Jack(A)	CKB1099
	(A,19,138) Pin Jack(B,C,D)	CKB1056
JA401	(A,158,129) Antenna Jack	YKS5041
JA892	(A,42,141) Jack	YKS5035
JA901	(A,113,141) Connector	CKM1613
⚠	Fuse (10 A)	YEK5001

RESISTORS

Circuit Symbol and No.		Part No.
R 251	(A,18,131) (A)	RS1/16SS821J
R 252	(A,13,128) (A)	RS1/16SS821J
R 253	(A,15,131) (A)	RS1/16SS223J
R 254	(A,11,131) (A)	RS1/16SS223J
R 255	(A,29,132)	RS1/16SS821J
R 256	(A,19,131)	RS1/16SS821J
R 257	(A,28,131)	RS1/16SS223J
R 258	(A,21,131)	RS1/16SS223J
R 301	(A,68,127)	RS1/16SS471J
R 302	(A,82,125)	RS1/16SS471J
R 303	(A,73,127)	RS1/16SS471J
R 304	(A,78,126)	RS1/16SS471J
R 305	(A,89,127)	RS1/16SS103J
R 306	(A,89,129)	RS1/16SS221J
R 307	(A,88,128)	RS1/16SS223J
R 309	(A,89,125)	RS1/16SS103J
R 310	(A,99,129)	RS1/16SS0R0J
R 311	(A,87,125)	RS1/16SS473J
R 401	(A,161,106)	RS1/16SS221J
R 402	(A,161,100)	RS1/16SS751J
R 403	(A,139,104) (A,B,C)	RS1/16SS391J
	(A,139,104) (D)	RS1/16SS331J
R 404	(A,142,99)	RS1/16SS105J
R 406	(A,154,108)	RS1/16SS105J
R 407	(A,139,96)	RS1/16SS330J
R 408	(A,137,97) (A,B,C)	RS1/16SS471J
	(A,137,97) (D)	RS1/16SS361J
R 409	(A,144,98) (D)	RS1/16SS0R0J
R 411	(A,138,91) (A,B,C)	RS1/16SS681J
	(A,138,91) (D)	RS1/16SS391J

Circuit Symbol and No.		Part No.
R 412	(A,152,78)	RS1/4SA8R2J
R 413	(A,158,78)	RS1/4SA8R2J
R 414	(A,139,87)	RS1/16SS0R0J
R 415	(A,152,80) (B,C,D)	RS1/16SS0R0J
R 531	(A,91,94)	RS1/16SS473J
R 532	(A,91,85)	RS1/16SS222J
R 533	(A,92,85)	RS1/16SS222J
R 534	(A,93,92)	RS1/16SS272J
R 535	(A,95,92)	RS1/16SS472J
R 536	(A,96,92)	RS1/16SS472J
R 537	(A,96,85)	RS1/16SS101J
R 538	(A,95,84)	RS1/16SS101J
R 551	(A,25,111)	RS1/16SS682J
R 552	(A,30,112)	RS1/16SS0R0J
R 553	(A,27,112)	RS1/16SS1803D
R 554	(A,27,110)	RS1/16SS4302D
R 555	(A,39,124)	RS1/10SR471J
R 601	(A,101,66)	RS1/16SS473J
R 602	(A,107,63)	RS1/16SS473J
R 603	(A,109,62)	RS1/16SS473J
R 609	(A,122,64)	RS1/16SS473J
R 610	(A,122,70)	RS1/16SS473J
R 611	(A,123,69)	RS1/16SS473J
R 613	(A,121,76)	RS1/16SS152J
R 614	(A,122,78)	RS1/16SS473J
R 615	(A,130,79)	RS1/16SS473J
R 616	(A,125,67)	RS1/16SS473J
R 617	(A,131,81)	RS1/16SS103J
R 618	(A,125,82) (A)	RS1/16SS473J
	(A,125,82) (D)	RS1/16SS103J
R 619	(A,126,82) (B,C,D)	RS1/16SS473J
R 622	(A,125,87)	RS1/16SS473J
R 623	(A,130,85)	RAB4CQ473J
R 624	(A,120,89)	RS1/16SS222J
R 625	(A,114,90)	RS1/16SS221J
R 626	(A,113,90)	RS1/16SS221J
R 627	(A,112,88)	RS1/16SS221J
R 628	(A,111,90)	RS1/16SS221J
R 629	(A,109,92)	RS1/16SS221J
R 630	(A,110,89)	RS1/16SS221J
R 631	(A,107,92)	RS1/16SS473J
R 632	(A,105,91)	RS1/16SS473J
R 633	(A,107,90)	RS1/16SS101J
R 634	(A,103,88)	RS1/16SS102J
R 635	(A,102,88)	RS1/16SS102J
R 636	(A,100,91)	RS1/16SS473J
R 637	(A,100,90)	RS1/16SS473J
R 638	(A,104,92)	RS1/16SS473J
R 639	(A,97,91)	RS1/16SS472J
R 640	(A,98,91)	RS1/16SS472J
R 643	(A,99,82)	RS1/16SS104J
R 644	(A,98,79)	RS1/16SS101J
R 645	(A,95,79)	RS1/16SS101J
R 646	(A,92,75)	RS1/16SS103J
R 647	(A,98,78)	RS1/16SS101J
R 648	(A,95,76)	RS1/16SS102J
R 649	(A,95,75)	RS1/16SS102J
R 650	(A,95,74)	RS1/16SS102J
R 651	(A,97,71)	RS1/16SS473J
R 652	(A,98,69)	RS1/16SS222J
R 653	(A,100,66)	RS1/16SS103J

Circuit Symbol and No.		Part No.
R 659	(A,123,61)	RS1/16SS153J
R 660	(A,123,60)	RS1/16SS153J
R 664	(A,133,62)	RS1/16SS103J
R 668	(A,93,71)	RS1/16SS473J
R 669	(A,95,69)	RS1/16SS473J
R 670	(A,119,60) (A,C,D)	RS1/16SS473J
R 671	(A,130,69)	RS1/16SS104J
R 681	(A,109,97)	RS1/16SS473J
R 682	(A,110,91)	RS1/16SS473J
R 683	(A,120,92)	RS1/16SS473J
R 684	(A,109,94)	RS1/16SS473J
R 685	(A,120,96)	RS1/16SS473J
R 705	(A,119,44)	RS1/16SS473J
R 719	(A,121,36)	RS1/16SS473J
R 721	(A,115,36)	RS1/16SS473J
R 722	(A,118,38)	RS1/16SS473J
R 723	(A,120,38)	RS1/16SS473J
R 724	(A,107,38)	RS1/16SS473J
R 754	(A,127,92)	RS1/16SS473J
R 801	(A,124,22)	RS1/10SR222J
R 803	(A,121,18)	RS1/16SS223J
R 804	(A,118,18)	RS1/16SS223J
R 805	(A,121,19)	RS1/10SR101J
R 806	(A,118,20)	RS1/10SR101J
R 807	(A,119,20)	RS1/10SR101J
R 808	(A,124,20)	RS1/10SR222J
R 809	(A,115,21)	RS1/10SR220J
R 810	(A,114,21)	RS1/10SR220J
R 813	(A,107,16)	RS1/10SR222J
R 814	(A,101,19)	RS1/10SR222J
R 815	(A,100,19)	RS1/16SS822J
R 816	(A,96,19)	RS1/10SR222J
R 817	(A,95,19)	RS1/10SR222J
R 818	(A,104,13)	RS1/10SR0R0J
R 851	(A,93,20)	RS1/16SS472J
R 874	(A,147,58)	RS1/10SR391J
R 875	(A,149,58)	RS1/10SR473J
R 878	(A,124,26)	RS1/10SR103J
R 879	(A,156,67)	RS1/10SR122J
R 891	(A,58,138)	RS1/16SS102J
R 892	(A,58,136)	RS1/16SS102J
R 911	(A,145,40)	RS1/10SR1R0J
R 912	(A,141,41)	RS1/10SR1R0J
R 913	(A,154,41)	RS1/16SS223J
R 914	(A,130,40)	RS1/16SS223J
R 941	(A,94,121)	RS1/16SS223J
R 942	(A,94,122)	RS1/16SS473J
R 943	(A,95,125) (A)	RS1/16SS333J
	(A,95,125) (B,C,D)	RS1/16SS682J
R 944	(A,98,123) (A)	RS1/4SA122J
	(A,98,123) (B,C,D)	RS1/4SA102J
R 973	(A,90,63)	RS1/16SS222J
R 974	(A,98,55)	RS1/16SS101J
R 975	(A,98,54)	RS1/16SS101J
R 976	(A,98,52)	RS1/16SS101J

CAPACITORS

Circuit Symbol and No.		Part No.
C 201	(A,96,115)	CKSRYB105K10
C 202	(A,104,116)	CKSRYB105K10
C 203	(A,92,116)	CKSRYB105K10
C 204	(A,107,115)	CKSRYB105K10
C 205	(A,94,116)	CKSRYB105K10
C 206	(A,107,114)	CKSRYB105K10
C 207	(A,94,108)	CKSSYB104K10
C 208	(A,94,106)	CKSSYB104K10
C 209	(A,93,104) 10 uF	CCG1192
C 210	(A,96,106)	CCSSCH151J50
C 211	(A,109,107)	CCSSCH151J50
C 212	(A,108,109) 10 uF	CCG1192
C 213	(A,108,106)	CKSSYB104K10
C 214	(A,108,104)	CKSSYB104K10
C 215	(A,108,102)	CKSSYB104K10
C 216	(A,92,101) 10 uF	CCG1192
C 217	(A,95,100)	CKSSYB104K10
C 218	(A,114,109)	XCEVW470M16
C 219	(A,112,103) 10 uF	CCG1192
C 220	(A,106,98) 10 uF	CCG1192
C 223	(A,91,101)	CKSSYB102K50
C 224	(A,115,103)	CKSSYB104K10
C 229	(A,110,112)	CKSSYB102K50
C 236	(A,110,104)	CKSRYB105K10
C 251	(A,35,128) 4.7 uF(A)	CCG1201
C 252	(A,17,127) 4.7 uF(A)	CCG1201
C 253	(A,17,130) (A)	CCSSCH101J50
C 254	(A,10,130) (A)	CCSSCH101J50
C 255	(A,35,132) 4.7 uF	CCG1201
C 256	(A,31,130) 4.7 uF	CCG1201
C 257	(A,26,131)	CCSSCH101J50
C 258	(A,20,131)	CCSSCH101J50
C 260	(A,33,138)	CKSSYB104K10
C 261	(A,6,133)	CKSSYB103K16
C 301	(A,69,129)	CKSRYB224K16
C 303	(A,80,129)	CKSRYB224K16
C 305	(A,72,129)	CKSRYB224K16
C 307	(A,77,129)	CKSRYB224K16
C 313	(A,83,130)	CKSRYB105K16
C 314	(A,135,126)	CKSRYB104K16
C 317	(A,60,129)	XCEVW100M16
C 319	(A,62,134)	CCSSCH101J50
C 320	(A,64,134)	CCSSCK1R0C50
C 321	(A,83,129)	CCSSCH101J50
C 322	(A,106,126)	CKSRYB104K16
C 323	(A,106,129)	CCSRCH100D50
C 324	(A,102,129)	CCSRCH100D50
C 325	(A,94,132)	CCSRCH100D50
C 326	(A,95,140)	CCSRCH100D50
C 327	(A,87,129)	CKSRYB105K10
C 401	(A,154,100)	CKSSYB104K10
C 402	(A,155,101)	CKSSYB103K16
C 403	(A,152,102)	CKSRYB105K10
C 405	(A,162,101)	CKSSYB103K16
C 406	(A,160,101)	CKSSYB103K16
C 408	(A,161,105)	CKSSYB103K16
C 409	(A,156,105)	CCSSCH6R0D50
C 410	(A,155,107)	CCSSCH330J50
C 411	(A,148,99)	CKSSYB103K16
C 412	(A,148,101)	CKSSYB104K10
C 413	(A,150,101)	CKSSYB104K10
C 414	(A,145,100)	CKSSYB103K16

Circuit Symbol and No.		Part No.
C 415	(A,144,101) 10 uF	CCG1192
C 416	(A,147,100)	CKSSYB104K10
C 418	(A,142,101)	CKSSYB223K16
C 419	(A,146,110) (D)	CCSSCH150J50
C 420	(A,150,106) (A,D)	CKSSYB103K16
C 421	(A,154,111) (B,C)	CCSSCJ3R0C50
C 423	(A,144,106) (D)	CCSSCH8R0D50
C 424	(A,140,101)	CKSSYB103K16
C 425	(A,138,99) 10 uF	CCG1192
C 426	(A,139,97)	CKSSYB104K10
C 427	(A,144,97)	CKSSYB104K10
C 428	(A,137,96) (A,B,C)	CCSSCH101J50
	(A,137,96) (D)	CCSSCH220J50
C 429	(A,136,96)	CKSSYB103K16
C 430	(A,139,90)	CKSSYB102K50
C 432	(A,138,92) (A,B,C)	CCSSCH820J50
	(A,138,92) (D)	CCSSCK2R0C50
C 433	(A,136,91)	CKSSYB102K50
C 435	(A,139,86) (A,B,C)	CKSRYB474K10
	(A,139,86) (D)	CKSRYB105K10
C 439	(A,145,80) (D)	CKSRYB104K16
C 440	(A,142,86)	CKSSYB102K50
C 441	(A,137,89) (B,C,D)	CCSSCH100D50
C 442	(A,146,83)	CKSSYB104K10
C 444	(A,152,82) 2.2 uF	CCG1218
C 445	(A,156,82) (A,B,C)	CKSSYB104K10
C 447	(A,157,83) (B,C)	CKSRYB105K10
C 448	(A,158,85) (A,B,C)	CKSSYB104K10
	(A,158,85) (D)	CKSSYB103K16
C 449	(A,161,85)	CCSSCH9R0D50
C 450	(A,161,90)	CCSSCH9R0D50
C 451	(A,158,91)	CKSSYB104K10
C 452	(A,158,94)	CKSRYB105K10
C 453	(A,160,96)	CKSSYB104K10
C 455	(A,159,97)	CKSRYB224K16
C 456	(A,161,92)	CKSSYB472K25
C 457	(A,161,93)	CKSSYB472K25
C 459	(A,154,83) (A,B,C)	CCSSCH101J50
	(A,154,83) (D)	CKSSYB102K50
C 461	(A,145,104) (A,B,C)	CKSSYB104K10
C 464	(A,162,98) 1 uF(D)	DCH1246
C 465	(A,142,106) (D)	CKSSYB103K16
C 466	(A,137,79) (D)	CKSRYB105K10
C 467	(A,150,81) (D)	CKSSYB104K10
C 468	(A,142,79) (D)	CKSRYB105K10
C 531	(A,91,93)	CKSSYB104K10
C 532	(A,93,93)	CKSSYB104K10
C 551	(A,13,121)	XCEVW221M16
C 552	(A,13,107)	CKSRYB105K16
C 553	(A,15,110)	CKSSYB103K16
C 555	(A,25,112)	CKSSYB682K25
C 556	(A,32,120)	CEVQW221M6R3
C 557	(A,32,116)	CKSRYB105K10
C 560	(A,108,21)	CKSRYB105K10
C 561	(A,102,24)	CKSRYB105K10
C 564	(A,32,114) 4.7 uF	CCG1201
C 565	(A,15,107) 4.7 uF	CCG1222
C 601	(A,104,66)	CKSSYB104K10
C 602	(A,109,65)	CKSSYB104K10
C 603	(A,111,65)	CKSSYB104K10
C 604	(A,112,65)	CKSSYB104K10

Circuit Symbol and No.		Part No.
C 605	(A,116,65)	CKSSYB104K10
C 606	(A,122,71)	CKSSYB104K10
C 607	(A,126,73)	CCSSCH120J50
C 608	(A,126,78)	CCSSCH120J50
C 609	(A,121,73)	CKSSYB104K10
C 610	(A,121,75)	CKSSYB104K10
C 611	(A,122,77)	CKSSYB104K10
C 612	(A,122,82)	CKSSYB104K10
C 613	(A,123,82)	CKSSYB104K10
C 618	(A,123,89)	CCSSCH120J50
C 619	(A,123,94)	CCSSCH120J50
C 620	(A,114,88)	CKSSYB104K10
C 621	(A,108,88)	CKSSYB104K10
C 622	(A,105,93)	CCSSCH220J50
C 623	(A,106,88)	CKSSYB104K10
C 624	(A,105,88)	CKSSYB104K10
C 625	(A,104,90)	CKSSYB104K10
C 626	(A,100,80)	CKSSYB104K10
C 627	(A,97,81)	CCSSCH220J50
C 628	(A,95,81)	CCSSCH220J50
C 629	(A,99,75)	CKSSYB104K10
C 630	(A,99,73)	CKSSYB104K10
C 631	(A,96,77)	CCSSCH220J50
C 672	(A,123,73) 1 uF	DCH1246
C 681	(A,121,96)	CKSSYB104K10
C 683	(A,120,94)	CCSSCJ3R0C50
C 801	(A,124,6)	CCSRCH221J50
C 806	(A,125,8)	CKSRYB104K16
C 807	(A,122,14)	CKSRYB105K10
C 808	(A,108,19)	CKSRYB104K16
C 809	(A,96,16)	CCSRCH221J50
C 810	(A,96,13)	CCSRCH221J50
C 811	(A,104,20)	CKSSYB104K10
C 871	(A,153,62)	CKSSYB104K16
C 873	(A,124,24)	CKSRYB104K16
C 891	(A,52,138)	CKSRYB104K16
C 892	(A,34,139)	CKSRYB104K16
C 893	(A,34,135)	CKSRYB102K50
C 894	(A,52,134)	CKSRYB102K50
C 901	(A,133,124) 2 200 uF/16 V	CCH2040
C 912	(A,152,40)	CKSSYB102K50
C 913	(A,131,43)	CKSSYB102K50
C 914	(A,156,56)	XCEAT102M16
C 915	(A,132,42)	CKSRYB104K16
C 916	(A,147,43) 4.7 uF	CCG1201
C 917	(A,145,46)	CKSSYB102K50
C 919	(A,151,42) 4.7 uF	CCG1201
C 921	(A,135,42) 4.7 uF	CCG1201
C 923	(A,159,41) 4.7 uF	CCG1201
C 926	(A,140,44) 4.7 uF	CCG1201
C 927	(A,139,42)	CKSSYB102K50
C 941	(A,96,124)	CKSRYB104K16
C 969	(A,135,113) 10 uF	CCG1192
C 973	(A,98,53)	CCSSCH470J50

B

Unit Number : (A)
Unit Number : (B,C,D)
Unit Name : Keyboard Unit

Circuit Symbol and No.		Part No.

MISCELLANEOUS

IC 1801	(B,84,22) IC	PD6583A8
IC 1941	(A,156,38) IR RC REC Module(B,C,D)	SIR8440B5
Q 1951	(B,16,15) Transistor(B,C,D)	LTC014EEB
Q 1952	(B,18,19) Transistor(A)	LTC014EEB
D 1951	(A,64,21) White LED	SWBA05(FI231719)
D 1953	(A,52,19) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1954	(A,49,11) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1955	(A,51,30) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1956	(A,66,7) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1957	(A,73,7) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1958	(A,89,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1959	(A,100,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1960	(A,111,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1961	(A,122,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1962	(A,133,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1963	(A,144,6) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1964	(A,14,32) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1965	(A,10,11) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1966	(A,12,21) Blue LED (B,C,D)	FC-F1608BK-470H5
D 1968	(A,9,21) LED(Red) (A)	SML-D12V8W(PQ)
D 1969	(A,48,11) LED(Red) (A)	SML-D12V8W(PQ)
D 1970	(A,50,30) LED(Red) (A)	SML-D12V8W(PQ)
D 1971	(A,12,32) LED(Red) (A)	SML-D12V8W(PQ)
D 1972	(A,11,11) LED(Red) (A)	SML-D12V8W(PQ)
D 1973	(A,73,5) LED(Red) (A)	SML-D12V8W(PQ)
D 1974	(A,66,5) LED(Red) (A)	SML-D12V8W(PQ)
D 1975	(A,112,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1976	(A,102,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1977	(A,91,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1978	(A,145,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1979	(A,134,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1980	(A,123,6) LED(Red) (A)	SML-D12V8W(PQ)
D 1981	(A,53,19) LED(Red) (A)	SML-D12V8W(PQ)
L 1921	(B,130,10) Inductor	CTF1389
L 1922	(B,129,13) Inductor	CTF1389
L 1923	(B,131,6) Inductor	CTF1389
X 1801	(B,70,24) Ceramic Resonator 5.00 MHz	CSS1547
S 1839	(A,31,19) Encoder(MULTI-CONTROL)	CSD1168
CN1911	(A,155,24) Connector	CKS6443
CN1931	(B,108,9) Connector	CKS6451
JA1921	(A,155,10) Jack	CKN1090
V 1801	(A,141,32) Segment LCD	CAW2024

RESISTORS

R 1801	(B,89,13)	RS1/10SR473J
R 1802	(B,72,19)	RS1/10SR473J
R 1803	(B,75,23)	RS1/10SR222J
R 1805	(B,58,28)	RS1/10SR473J
R 1806	(B,60,29)	RS1/10SR473J
R 1807	(B,60,30)	RS1/10SR473J
R 1808	(B,60,32)	RS1/10SR473J
R 1823	(B,49,27)	RS1/10SR273J
R 1931	(B,45,17)	RS1/10SR222J
R 1932	(B,45,13)	RS1/10SR222J
R 1941	(B,128,24) (A)	RS1/10SR473J
R 1944	(B,132,26) (B,C,D)	RS1/10SR101J
R 1951	(B,59,20)	RS1/4SA221J
R 1952	(B,59,22)	RS1/4SA221J
R 1956	(B,51,20) (B,C,D)	RS1/10SR152J
R 1958	(B,28,7) (B,C,D)	RS1/10SR821J
R 1960	(B,20,30) (B,C,D)	RS1/10SR152J
R 1962	(B,88,10) (B,C,D)	RS1/10SR152J
R 1964	(B,57,12) (B,C,D)	RS1/10SR152J
R 1966	(B,141,19) (B,C,D)	RS1/10SR152J
R 1968	(B,17,31) (B,C,D)	RS1/10SR472J
R 1969	(B,21,11) (B,C,D)	RS1/10SR682J
R 1972	(B,21,13) (B,C,D)	RS1/10SR0R0J
R 1973	(B,18,17) (A)	RS1/10SR0R0J
R 1975	(B,13,19) (A)	RS1/10SR472J
R 1977	(B,48,13) (A)	RS1/8SQ102J
R 1980	(B,18,23) (A)	RS1/10SR392J
R 1981	(B,68,10) (A)	RS1/8SQ122J
R 1983	(B,51,13) (A)	RS1/8SQ821J
R 1985	(B,143,18) (A)	RS1/8SQ821J
R 1987	(B,55,21) (A)	RS1/4SA122J
R 1991	(B,51,8) (B,C,D)	RS1/10SR0R0J
R 1996	(B,59,9) (A)	RS1/10SR0R0J

CAPACITORS

C 1806	(B,67,23)	CKSRYB104K16
C 1807	(B,70,21)	CKSRYB105K10
C 1911	(B,147,21)	CKSRYB104K16
C 1912	(B,144,22)	CKSRYB104K16
C 1941	(B,136,29) 10 uF(B,C,D)	CCG1192

C

Unit Number : QWM3750
Unit Name : BT Unit

MISCELLANEOUS

IC 21	(A,8,48) Regulator IC	S-1172B18-E6
IC 22	(A,21,46) IC	S-1206B33-U3
CN21	(A,34,27) Connector	CKS6346
CN23	(A,42,44) Connector	CKS3857

RESISTORS

R 28	(A,42,31)	RS1/10SR222J
R 29	(A,30,41)	RS1/10SR102J
R 30	(A,30,37)	RS1/10SR102J
R 38	(A,42,17)	RS1/10SR0R0J
R 39	(A,41,23)	RS1/10SR221J
R 40	(A,40,23)	RS1/10SR221J
R 41	(A,38,23)	RS1/10SR221J

CAPACITORS

C 23	(A,24,40)	XCEVW221M4
C 24	(A,7,44)	CKSRYB105K10
C 26	(A,27,48) 10 uF	CCG1192
C 29	(A,17,45)	CKSRYB105K10
C 33	(A,9,54) 10 uF	CCG1192
C 34	(A,42,30)	CKSRYB105K10
C 36	(A,32,40)	CKSRYB104K16
C 38	(A,15,46) 10 uF	CCG1192
C 39	(A,6,42) 10 uF	CCG1192